

# **FINDING OF SUITABILITY TO TRANSFER**

**PROPOSED TRANSFER OF THE 2LT WILLIAM S. HUISMAN  
UNITED STATES ARMY RESERVE CENTER (OH066)  
25445 HARVARD ROAD, BEACHWOOD, OHIO 44122  
TO THE CITY OF BEACHWOOD**



*Prepared For:*  
**88<sup>th</sup> Regional Readiness Command  
506 Roeder Circle  
Fort Snelling, Minnesota 55111-4009**

*Prepared By:*  
**U.S. Army Corps of Engineers – Louisville District  
Engineering Division – Environmental Engineering Branch  
600 Dr. Martin Luther King Jr. Place  
Louisville, Kentucky 40202-2232**

**JUNE 2004**

## **FINDING OF SUITABILITY TO TRANSFER**

**2 LT William S. Huisman United States Army Reserve Center (OH066)**  
**25445 Harvard Road**  
**WARRENSVILLE HEIGHTS, OHIO 44122**

**18 JUNE 2004**

### **1.0 PURPOSE**

The purpose of this Finding of Suitability to Transfer (FOST) is to document the environmental suitability of the Huisman United States Army Reserve Center (USARC) (OH066), located in Warrensville Heights, Ohio, for transfer to the City of Beachwood, Ohio, with the intended use as either: a service department facility, a City administrative facility, or a fire station. This document has been prepared in general conformance with, Section 120(h) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Department of Defense policy.

### **2.0 PROPERTY DESCRIPTION**

The Huisman USARC ("Subject Property") is located at 25445 Harvard Road, Warrensville Heights, Cuyahoga County, Ohio. The location and layout of the Site are shown in Attachment A and B of the attached Environmental Baseline Survey (EBS). The Subject Property occupies approximately 4.65 acres and is surrounded by undeveloped commercial property to the north, east, and west. The land to the south, across Harvard Road, is occupied by Cuyahoga Community College. The Subject Property contains three buildings, the Huisman USARC, the Organization Maintenance Shop (OMS), and a utility building. The Huisman USARC was constructed in 1962 and has a concrete foundation, concrete block walls that have been finished with red bricks. It is a two-story, U-shaped structure that is approximately 28,950 square feet (sf). The OMS building was constructed in 1963 and contains a slab-on-grade concrete foundation, with cinder block walls and a red brick veneer. It is a one-story, rectangular shaped structure that is approximately 6,576 sf. The utility building was constructed in 1962 and has a concrete foundation with concrete block walls and a red brick façade. It is a half-story, square structure that is approximately 25 sf. Automotive vehicle and military equipment parking areas are also located on the Subject Property.

### **3.0 ENVIRONMENTAL CONDITION OF THE PROPERTY**

A determination of the environmental condition of the property has been made based on the findings included in the attached EBS. The information provided in the EBS represents available environmental information, including visual observations, facility records, and federal

and state database and file information, related to the storage, release, treatment, or disposal of CERCLA hazardous substances or petroleum products or derivatives at the Subject Property.

The attached EBS provides a list of the documents, information sources, and references used to determine the environmental condition of the property.

### **3.1 ENVIRONMENTAL CONDITION OF PROPERTY CATEGORY**

In accordance with ASTM Designation D5746-98, *Standard Classification of Environmental Condition of Property Area Types for Defense Base Closure and Realignment Facilities*, the Site has been classified as Category Type 2, an area or parcel of real property where only the release or disposal of petroleum products or their derivatives has occurred. This classification was selected based on the identification of petroleum-impacted soils during the removal and closure of a 550-gallon underground storage tank. Subsection 3.3.2 provides additional information.

### **3.2 STORAGE, RELEASE, OR DISPOSAL OF CERCLA HAZARDOUS SUBSTANCES**

There is no evidence that CERCLA hazardous substances were stored, released, or disposed on the property in excess of the reportable quantities listed in 40 Code of Federal Regulations (CFR) Part 373. Accordingly, there is no need for any notification of hazardous substance storage, release, or disposal.

### **3.3 STORAGE, RELEASE, OR DISPOSAL OF PETROLEUM AND PETROLEUM PRODUCTS**

The site was classified as ECP Type 2, based on the identification of petroleum-impacted soils during the removal and closure of a 550-gallon underground storage tank. Total Petroleum Hydrocarbons (TPH) were detected in one of the soil samples at 210 milligrams per kilogram (mg/kg), below the determined action level of 904 mg/kg. Section 6 of the attached EBS provides a detailed discussion.

#### **3.3.1 Petroleum and Petroleum Products (Not Stored in USTs)**

The Property is listed under EPA's Resource Conservation and Recovery Information System (RCRIS) as a Small Quantity Generator (SQG), EPA ID# OH9210090040. A SQG is defined as a site which generates between 100 kilograms (kg) and 1,000 kg of hazardous waste per month. The Property is listed as a SQG based on the generation of waste from vehicle maintenance at the OMS. There is one hazardous material storage shed, adjacent to the OMS, and two flammable storage cabinets located inside the OMS. Typical wastes noted during the site reconnaissance were: used oily rags, used fuel and oil filters, used fuel, lamps (used), paint cans, used antifreeze, used motor oil, and other vehicle maintenance waste. Chemicals stored at the OMS include: 5-gallon containers of fuel, motor oil, brake fluid, gear oil, lubrication oil, flux paste, silicone compound, multipurpose grease, aerosol spray paints, as well as other typical vehicle maintenance fluids.

There is no evidence that any petroleum or petroleum products in excess of 55 gallons at one time were stored, released, or disposed of on the Property. Based on a visual inspection and the EDR report, which can be found in the attached EBS, relating to the facility's SQG hazardous waste permit, it appears that petroleum products and hazardous waste have been handled properly at the Property.

### **3.3.2 Underground and Above-Ground Storage Tanks (USTs/ASTs)**

A visual inspection was conducted to locate any aboveground storage tanks (ASTs) or underground storage tanks (USTs) on the Property. Evidence of USTs, including vent pipes, fill pipes, concrete pads, and access ways were investigated. Based on the visual inspection and an interview with Mr. Healey, Supervisory Staff Administrator for the 319<sup>th</sup> Quarter Master Battalion, there are no ASTs or USTs currently located on the Property. However, one 550-gallon waste oil UST existed on the Property in the past.

The waste oil UST was removed by Harza Environmental Services, Inc on October 29, 1998. Upon removal of the UST from the ground, the tank was observed in good condition and no holes were observed. Three soil samples were collected as part of the site assessment for permanent UST closure by removal. No VOCs were detected in any of the soil samples, Total Petroleum Hydrocarbons (TPH) was detected in one of the soil samples at 210 mg/kg, below the action level of 904 mg/kg. According to the Department of Commerce, Leaking Underground Storage Tank database, a no further action letter was issued (see the EDR report in Attachment H of the EBS). Based on this information it does not appear that the former operation of this UST has negatively impacted the environmental condition of the Property. Attachment 2 provides a *Notification of Petroleum Product Storage and Release*, which summarizes the petroleum products that were stored in and/or released from USTs and ASTs at the Subject Property.

### **3.4 POLYCHLORINATED BIPHENYLS (PCBs)**

An Asbestos, PCB, Lead Based Paint, and Radon Survey was conducted in March 2004 for the Property by ITI of South Florida, Inc (ITI). According to the survey, light ballasts in the USARC and OMS are assumed to contain PCBs based on several ballasts not having a "Non PCBs" label attached to it. All light ballasts were in good condition at the time of the site inspection. Additional testing of the ballasts should be performed prior to disturbance or disposal, or the ballasts must be managed in accordance with applicable Federal and State regulations. The survey also identified three pole-mounted transformers behind the USARC. There were no markings on the transformers and they are presumed to contain PCBs. All the transformers were in good condition and no leaks were evident from the units at the time of the inspection. According to the EBS, First Energy is the owner of the transformers on the Subject Property. Because owners of transformers are responsible for any environmental cleanup related to releases of chemicals from their units, if any liquid release is observed to occur from any of the transformers, First Energy should be notified immediately.

The deed will include the PCB notification and covenant that is included in the attached Environmental Protection Provisions.



### **3.5 ASBESTOS-CONTAINING MATERIAL (ACM)**

According to the 2004 ITI Survey, ACM was confirmed in the USARC building in the following locations: thermal system insulation, water tank insulation, floor tile and mastic, and exterior expansion joints between the bricks. During the 2004 ITI Survey, localized damage of the thermal system insulation was observed in some areas, especially at the elbows and joints.

The damaged thermal system insulation will be repaired or replaced prior to transfer of the property. ACM was presumed to be in other areas of the USARC and the OMS; refer to the attached EBS for a more detailed summary of the location of presumed ACM. The deed will include the asbestos warning and covenant included in the attached Environmental Protection Provisions.

### **3.6 LEAD-BASED PAINT (LBP)/LEAD HAZARDS**

According to the 2004 ITI Survey Lead-Based Paint was identified in the USARC and OMS. The location and condition of the LBP is listed in detail in the attached EBS. The following locations had LBP that was in “damaged condition” in the USARC: all painted components of staircases, brown and cream on metal (fair to damaged condition), exterior garage door frame/jamb, metal, grey (damaged condition); in the OMS: the exterior metal door jambs on the garage doors (damaged condition), and the yellow paint on the floor, west door (significantly damaged).

The USARC was equipped with an active indoor firing range from the 1960’s until the range was closed in 1991. The range was cleaned in July 2002 by IT Corporation and clearance wipe samples were conducted in August 2002. After cleaning, the range had lead levels from <2.5 micrograms/square foot ( $\mu\text{g}/\text{sf}$ ) (twelve ceiling and wall samples) to 82  $\mu\text{g}/\text{sf}$  [firing line (floor), 003DT]. The floor outside the entrance door had a lead level of 78  $\mu\text{g}/\text{sf}$ . These results indicate that the range floor lead levels were below the clearance criteria of 200  $\mu\text{g}/\text{sf}$ . A letter dated August 28, 2002 by IT Corporation certified that the cleaning activities at the firing range successfully attained the project clearance objectives and the former range was approved for occupancy. Any remodeling activities that may cause a release of dust on wall and floor surfaces should be undertaken in consideration of the Occupational Safety and Health Administration (OSHA) Construction Industry Standard for Lead (29 CFR 1926.62).

The deed will include the LBP/Lead Hazard warning and covenant that is included in the attached Environmental Protection Provisions.

### **3.7 RADIOLOGICAL MATERIALS**

U.S. Army radioactive commodities were managed at the Subject Property. Typical types of radioactive commodities at a facility similar to the Subject Property could have included radiac meters, chemical agent detectors, moisture density gauges, lensatic compasses, night-vision goggles, radioluminescent sites, and armored vehicle equipment gauges or weapons gauges. Such commodities are generally designed for extreme weather and combat conditions

with a limited amount of radionuclides in a non-dispersible form. Typical uses would have been to illuminate gauges or as use in scientific equipment. According to the EBS, this equipment is stored in a locked area on the first floor of the USARC.

There was no evidence to suggest that these items were ever improperly managed at the Subject Property, or that any radionuclides within these sealed-source items were ever released. As such, and based on the nature of the commodities stored (i.e, contained a limited amount of

radionuclides in a non-dispersible form), there is no indication that the environmental conditions at the Subject Property have been negatively impacted by the storage of these items on site.

### **3.8 RADON**

According to the EPA Radon Zone for Cuyahoga County, areas tested were classified in Zone 2, defined as having an indoor average level equal to or greater than 2 pCi/L and less than or equal to 4 pCi/L. In addition, a June 1993 radon survey conducted for the facility by 83<sup>rd</sup> ARCOM found radon levels < 4 pCi/L.

The deed will include the radon notification provision that is included in the attached Environmental Protection Provisions.

### **3.9 UNEXPLODED ORDNANCE**

No indications were found during the site reconnaissance or records review to indicate the presence of unexploded ordnance at the Property.

### **4.0 REMEDIATION**

There are no environmental remediation orders or agreements applicable to the property being transferred.

### **5.0 REGULATORY/PUBLIC COORDINATION**

Region V of the U.S. Environmental Protection Agency and the Ohio Environmental Protection Agency were notified of the initiation of the FOST process. A Notice of 30-Day Period for Public Comment, which will include a notification of the intent to sign the FOST, will be published in local Cleveland-area newspapers, including The Plain Dealer. To facilitate regulatory and public review, copies of the attached EBS and this FOST will be sent to local Cleveland-area libraries and State and Federal agencies before the newspaper publication date. An electronic copy of the EBS and FOST will also be available on the Internet at [www.usarc.army.mil/88thrc/](http://www.usarc.army.mil/88thrc/). Written comments will be sought for a period of 30 days. Comments received will be reviewed and incorporated, as appropriate. The final FOST will include a copy of the public and regulatory comments received.

## **6.0 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) COMPLIANCE**

The environmental impacts associated with the proposed transfer of the Property have been analyzed in accordance with the NEPA requirements. The results of this analysis have been documented in the 2004 Environmental Assessment for the Proposed Site for U.S. Army Reserve Center Lot 3, Chamberlin Road, South of East Aurora Road Twinsburg Township, Summitt County, Ohio 44087, which resulted in a Finding of No Significant Impact. Any encumbrances or conditions identified in such analysis as necessary to protect human health or the environment have been incorporated into this FOST.

## **7.0 ENVIRONMENTAL PROTECTION PROVISIONS**

On the basis of the above results from the EBS and other environmental studies, and in consideration of the intended use of the property, certain terms and conditions are required for the proposed property transfer. These terms and conditions are set forth in the attached Environmental Protection Provisions and will be included in the deed.

## **8.0 FINDING OF SUITABILITY TO TRANSFER**

Based on the above information, I conclude that Department of Defense requirements to reach a finding of suitability to transfer the property have been met, subject to the terms and conditions set forth in the attached Environmental Protection Provisions. All removal or remedial actions necessary to protect human health and the environment have been taken and the property is transferable under CERCLA section 120(h)(3). In addition to the Environmental Protection Provisions, the deed for this transaction will also contain the following:

- The covenant under CERCLA §120(h)(3)(A)(ii)(I) warranting that all remedial action under CERCLA necessary to protect human health and the environment with respect to hazardous substances remaining on the property has been taken before the date of transfer;
- The covenant under CERCLA §120(h)(3)(A)(ii)(II) warranting that any remedial action under CERCLA found to be necessary after the date of transfer with respect to such hazardous substances remaining on the property shall be conducted by the United States; and
- The clause as required by CERCLA §120(h)(3)(A)(iii) granting the United States access to the property in any case in which remedial action or corrective action is found to be necessary after the date of transfer.

The proposal for transfer of accountability has been adequately assessed and evaluated for (a) environmental hazards, (b) environmental impacts anticipated from future use of the property to the extent known, and (c) adequate notice of disclosure resources. The City of Beachwood has not formulated any specific plans for the future use of the Army Reserve Center. Some of the possibilities that have been discussed are a service department facility for maintenance of City vehicles and equipment; a City administrative facility; or, a fire station. Any of these future uses would be consistent with its current use. The primary uses of the Army Reserve Center have historically been for administrative, educational, and training purposes and operator-level maintenance of vehicles and equipment. Based on the City of Beachwood's current proposals for the Subject Property, the transfer of this property does not present a current

*FINDING OF SUITABILITY TO TRANSFER*  
*2 LT William S. Huisman USARC (OH066)*  
*Warrensville Height, Ohio*

or future risk to human health or the environment, subject to inclusion and compliance with the appropriate deed covenants stated above.

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FOR THE COMMANDER  
James A. Lundell  
Deputy, Management and Support  
88<sup>th</sup> Regional Readiness Command

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Date

Attachments/Enclosures:

1. Environmental Protection Provisions
2. Notification of Petroleum Product Storage and Release
3. May 2004 Environmental Baseline Survey

## **ENVIRONMENTAL PROTECTION PROVISIONS**

The following conditions, restrictions, and notifications will be placed in the deed to ensure protection of human health and the environment at the Huisman U.S. Army Reserve Center located in Warrensville Heights, Ohio.

### **INCLUSION OF PROVISIONS**

The person or entity to whom the property is transferred shall neither transfer the property, lease the property, nor grant any interest, privilege, or license whatsoever in connection with the property without the inclusion of the environmental protection provisions contained herein, and shall require the inclusion of such environmental protection provisions in all further deeds/easements, transfers, leases, or grant of any interest, privilege, or license.

### **CERCLA ACCESS CLAUSE**

The Government, the U.S. Environmental Protection Agency (USEPA) and the Ohio Environmental Protection Agency (OEPA) and their officers, agents, employees, contractors, and subcontractors have the right, upon reasonable notice to the Grantee/Transferee, to enter upon the Transferred Premises in any case in which a response action or corrective action is found to be necessary, after the date of transfer of the property, or such access is necessary to carry out a response action or corrective action on adjoining property, including, without limitation, the following purposes:

- \* To conduct investigations and surveys, including, where necessary, drilling, soil and water sampling, testing-pitting, test soil borings and other activities;
- \* To inspect field activities of the Government and its contractors and subcontractors;
- \* To conduct any test or survey related to the environmental conditions at the Transferred Property or to verify any data submitted to the USEPA or the OEPA by the Government relating to such conditions;
- \* To construct, operate, maintain or undertake any other response or remedial actions as required or necessary including, but not limited to monitoring wells, pumping wells and treatment facilities.

### **NO LIABILITY FOR NON-ARMY CONTAMINATION**

The Army shall not incur liability for additional response action or corrective action, found to be necessary after the date of transfer, in any case in which the person or entity to whom the property is transferred, or other non-Army entities, is identified as the party responsible for contamination of the property.

**NOTICE OF THE PRESENCE OF LEAD HAZARDS AND  
COVENANT AGAINST THE USE OF THE PROPERTY FOR RESIDENTIAL PURPOSE**

**A.** The Grantee/Transferee is hereby informed and does acknowledge that all buildings on the Property, which were constructed or rehabilitated prior to 1978, are presumed to contain lead-based paint. Lead from paint, paint chips, and dust can pose health hazards if not managed properly. Every purchaser of any interest in Residential Real Property on which a residential dwelling was built prior to 1978 is notified that such property may present exposure to lead from lead-based paint that may place young children at risk of developing lead poisoning. Lead poisoning in young children may produce permanent neurological damage, including learning disabilities, reduced intelligence quotient, behavioral problems, and impaired memory. Lead poisoning also poses a particular risk to pregnant women. The seller of any interest in residential real property is required to provide the buyer with any information on lead-based paint hazards from risk assessments or inspections in the seller's possession and notify the buyer of any known lead hazards. "Residential Real Property" means dwelling units, common areas, building exterior surfaces, and any surrounding land, including outbuildings, fences and play equipment affixed to the land, available for use by residents but not including land used for agricultural, commercial, industrial, or other non-residential purposes, and not including paint on the pavement of parking lots, garages, or roadways and buildings visited regularly by the same child, 6 years of age or under, on at least two different days within any week, including day-care centers, preschools and kindergarten classrooms.

**B.** Available information concerning known lead-based paint and/or lead hazards, the location of lead-based paint and/or lead hazards, and the condition of painted surfaces, contained in the attached Environmental Baseline Survey, have been provided to the Grantee/Transferee. All purchasers must receive the federally approved pamphlet on lead poisoning prevention. The Grantee/Transferee hereby acknowledges receipt of all of the information described in this subparagraph.

**C.** The Grantee/Transferee acknowledges that it has received the opportunity to conduct its own risk assessment or inspection for the presence of lead-based paint and/or lead hazards prior to execution of this document.

**D.** The Grantee/Transferee covenants and agrees that it shall not permit the occupancy or use of any buildings or structures on the Property as Residential Real Property, as defined in paragraph A, above, without complying with this section and all applicable federal, state, and local laws and regulations pertaining to lead-based paint and/or lead-based paint hazards. Prior to permitting the occupancy of the Property where its use subsequent to sale is intended for residential habitation, the Grantee/Transferee specifically agrees to perform, at its sole expense, the Army's abatement requirements under Title X of the Housing and Community Development Act of 1992 (Residential Lead-Based Paint Hazard Reduction Act of 1992) (hereinafter Title X).

The Grantee/Transferee shall, after consideration of the guidelines and regulations established pursuant to Title X: (1) Perform a reevaluation of the Risk Assessment if more than 12 months have elapsed since the date of the last Risk Assessment; (2) Comply with the joint HUD and EPA Disclosure Rule (24 CFR 35, Subpart H, 40 CFR 745, Subpart F), when applicable, by disclosing

to prospective purchasers the known presence of lead-based paint and/or lead-based paint hazards as determined by previous risk assessments; (3) Abate lead dust and lead hazards in pre-1960

residential real property, as defined in paragraph A, above, in accordance with the procedures in 24 CFR 35; (4) Abate soil-lead hazards in pre-1978 residential real property, as defined in paragraph A, above, in accordance with the procedures in 24 CFR 35; (5) Abate lead-soil hazards following demolition and redevelopment of structures in areas that will be developed as residential real property; (6) Comply with the EPA lead-based paint work standards when conducting lead-based paint activities (40 CFR 745, Subpart L); (7) Perform the activities described in this paragraph within 12 months of the date of the lead-based paint risk assessment and prior to occupancy or use of the residential real property; and (8) Send a copy of the clearance documentation to the Grantor.

In complying with these requirements, the Grantee/Transferee covenants and agrees to be responsible for any abatement or remediation of lead-based paint or lead-based paint hazards on the Property found to be necessary as a result of the subsequent use of the property for residential purposes. The Grantee/Transferee covenants and agrees to comply with solid or hazardous waste laws that may apply to any waste that may be generated during the course of lead-based paint abatement activities.

**E.** The Grantee/Transferee further agrees to indemnify and hold harmless the Army, its officers, agents and employees, from and against all suits, claims, demands, or actions, liabilities, judgments, costs and attorney's fees arising out of, or in a manner predicated upon personal injury, death or property damage resulting from, related to, caused by or arising out of lead-based paint or lead-based paint hazards on the Property if used for residential purposes.

**F.** The covenants, restrictions, and requirements of this Section shall be binding upon the Grantee/Transferee, its successors and assigns and all future owners and shall be deemed to run with the land. The Grantee/Transferee on behalf of itself, its successors and assigns covenants that it will include and make legally binding, this Section, in all subsequent transfers, leases, or conveyance documents.”

#### **NOTICE OF THE PRESENCE OF ASBESTOS AND COVENANT**

**A.** The TRANSFEE is hereby informed and does acknowledge that friable and non-friable asbestos or asbestos-containing material (“ACM”) has been found on the Property, as described in Subsection 6.8 of the attached 2004 EBS. The ACM on the property does not currently pose a threat to human health or the environment.

**B.** The Transferee/Grantee covenants and agrees that its use and occupancy of the Property will be in compliance with all applicable laws relating to asbestos; and that the Army assumes no liability for future remediation of asbestos or damages for personal injury, illness, disability, or death, to the Transferee/Grantee, its successors or assigns, or to any other person, including members of the general public, arising from or incident to the purchase, transportation, removal, handling, use, disposition, or other activity causing or leading to contact of any kind whatsoever with asbestos on the Property, whether the Transferee/Grantee, its successors or assigns have properly warned or failed to properly warn the individual(s) injured. The Transferee/Grantee

agrees to be responsible for any future remediation of asbestos found to be necessary on the Property.

**C.** Unprotected or unregulated exposures to asbestos in product manufacturing, shipyard, and building construction workplaces have been associated with asbestos-related diseases. Both the Occupational Safety and Health Administration (OSHA) and the USEPA regulate asbestos because of the potential hazards associated with exposure to airborne asbestos fibers. Both OSHA and USEPA have determined that such exposure increases the risk of asbestos-related diseases, which include certain cancers and which can result in disability or death.

**D.** The grantee/transferee acknowledges that it has inspected the property as to its asbestos content and condition and any hazardous or environmental conditions relating thereto. The grantee/transferee shall be deemed to have relied solely on its own judgment in assessing the overall condition of all or any portion of the property, including, without limitation, any asbestos hazards or concerns.

**E.** No warranties, either express or implied, are given with regard to the condition of the property, including, without limitation, whether the property does or does not contain asbestos or is or is not safe for a particular purpose. The failure of the grantee/transferee to inspect, or to be fully informed as to the condition of all or any portion of the property offered, will not constitute grounds for any claim or demand against the United States.

**F.** The Grantee/Transferee further agrees to indemnify and hold harmless the Army, its officers, agents and employees, from and against all suits, claims, demands or actions, liabilities, judgments, costs and attorneys' fees arising out of, or in any manner predicated upon, exposure to asbestos on any portion of the Property after this conveyance of the property, to the Grantee/Transferee or any future remediation or abatement of asbestos or the need therefore. The Grantee's/Transferee's obligation hereunder shall apply whenever the United States incurs costs or liabilities for actions giving rise to liability under this section.

#### **PCB NOTIFICATION AND COVENANT**

**A.** The Grantee/Transferee is hereby informed and does acknowledge that equipment containing polychlorinated biphenyls (PCBs) may exist on the Property to be conveyed, described as follows: light ballasts (not marked as "Non PCBs") and pole-mounted transformers. The transformers are reportedly owned by First Energy. Because owners of transformers are responsible for any environmental cleanup related to releases of chemicals from their units, if any liquid release is observed to occur from any of the transformers, First Energy should be notified immediately. The PCB equipment on the Subject Property does not currently pose a threat to human health or the environment.

**B.** Upon request, the Army agrees to furnish to the Grantee/Transferee any and all records in its possession related to such PCB equipment necessary for the continued compliance by the Grantee/Transferee with applicable laws and regulations related to the use and storage of PCBs or PCB containing equipment.



C. The Grantee/Transferee covenants and agrees that its continued possession, use and management of any PCB containing equipment will be in compliance with all applicable laws relating to PCBs and PCB containing equipment, and that the Army assumes no liability for the future remediation of PCB contamination or damages for personal injury, illness, disability, or

death to the Grantee/Transferee, its successors or assigns, or to any other person, including members of the general public arising from or incident to future use, handling, management, disposition, or other activity causing or leading to contact of any kind whatsoever with PCBs or PCB containing equipment, whether the Grantee/Transferee, its successors or assigns have properly warned or failed to properly warn the individual(s) insured. The Grantee/Transferee agrees to be responsible for any future remediation of PCBs or PCB containing equipment found to be necessary on the Property.

#### **RADON NOTIFICATION**

A. Available radon assessment data pertaining to the property is available for the Grantee/Transferee in the attached Environmental Baseline Survey. According to said radon data, contained in the attached Environmental Baseline Survey, the Subject Property is located in EPA Radon Zone 2, defined as having an indoor average level equal to or greater than 2 picoCuries per Liter (pCi/L) and less than or equal to 4 pCi/L. In June 1993, a radon survey was conducted and found levels less than 4 pCi/L.

B. The Grantee/Transferee acknowledges that it has had the opportunity to inspect the Parcels as to radon levels prior to accepting the Property. Failure of the Grantee/Transferee to inspect or to be fully informed as to the radon levels of the Property will not constitute grounds for any claim or demand against the United States.

C. The Grantee/Transferee shall indemnify and hold harmless the United States, its officers, agents and employees from and against all suits, claims, demands, or actions, liabilities, judgments, costs and attorneys' fees arising out of, or in any manner predicated upon, exposure to radon on any portion of the Parcels after conveyance of the Parcels or any future redemption or abatement of radon or the need therefore. The Grantee's/Transferee's obligation hereunder shall apply whenever the United States incurs costs or liabilities for actions giving rise to liability under this section. The obligations of the Grantee/Transferee under this section are solely those of the Grantee/Transferee and not its successors and assigns.

#### **NOTICE OF UXO CLEARANCE**

Based upon a review of existing records and available information, none of the buildings and/or land proposed for transfer is known to contain unexploded ordnance (UXO). In the event that the Grantee/Transferee, its successors, and assigns, should discover any ordnance on the Subject Property, it shall not attempt to remove or destroy it, but shall immediately notify the local Police Department and the Grantor, and the Grantor or Grantor-designated explosive ordnance personnel will be dispatched promptly to dispose of such ordnance at no expense to the Grantee.

<b>NOTIFICATION OF PETROLEUM PRODUCT STORAGE AND RELEASE</b>			
<b>Location</b>	<b>Name of Petroleum Product(s)</b>	<b>Date of Storage, Release, or Disposal</b>	<b>Remedial Actions</b>
550-gallon UST	Used Oil	UST was installed along with the Oil Water Separator at the time the OMS was constructed in 1963.  UST was removed from the Subject Property on 29 Oct 98.	During removal, the tank was in good condition, no holes were observed. Three soil samples were collected and analyzed for VOCs and TPH. No VOCs were detected in any of the soil samples. TPH was detected in one sample at 210 mg/kg, below the action level of 904 mg/kg. According to the Department of Commerce, Leaking Underground Storage Tank database, a no further action letter was issued.

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*2 LT William S. Huisman USARC (OH066)*  
*Warrensville Height, Ohio*

## **ATTACHMENT 3**

### **ATTACHMENT 3**

#### **2004 ENVIRONMENTAL BASELINE SURVEY**



**Installation Management Agency, Army Reserve Division**

# **ENVIRONMENTAL BASELINE SURVEY**

**Huisman United States Army  
Reserve Center (OH 066)  
25445 Harvard Road  
Warrensville Heights, Ohio**



*Prepared For:*

**88<sup>th</sup> Regional Readiness Command  
506 Roeder Circle  
Fort Snelling, Minnesota 55111-4009**

*Prepared By:*

**Installation Management Agency, Army Reserve Division  
1401 Deshler Street SW  
Fort McPherson, Georgia 30330-2000**

**March 31, 2004**

## ENVIRONMENTAL BASELINE SURVEY SIGNATURE SHEET

*Prepared by:*

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Michael Dickinson  
Hydrogeologist/Environmental Property Assessor  
Engineering & Environment, Inc.

Date

*Reviewed by:*

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Lisa Gulbranson  
TAD-PGS Contractor  
Environmental Manager  
88<sup>th</sup> RRC

Date

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Eric Johnson  
TAD-PGS Contractor  
State Environmental Manager  
88<sup>th</sup> RRC

Date

*Approved by:*

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David Jennings  
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Installation Management Agency, Army Reserve Division

Date

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## **LIST OF ATTACHMENTS**

### **ATTACHMENT**

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## SECTION 1.0 EXECUTIVE SUMMARY

### 1.1 INTRODUCTION

The Installation Management Agency, Army Reserve Division (IMA-ARD) has prepared this Environmental Baseline Survey (EBS) for the 88th Regional Readiness Command (RRC) at the 2 Lieutenant (LT) S. William Huisman United States Army Reserve Center (USARC), hereafter referred to as the "Property". The Property is located at 25445 Harvard Road in Warrensville Heights, Cuyahoga County, Ohio. The Property lies on the north side of the road, approximately 1,000 feet west of the intersection of Richmond Road and Harvard Road.

This EBS was developed in general conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) Designation D6008-96, *Standard Practice for Conducting Environmental Baseline Surveys*, the ASTM Designation E1527-00, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, and Army Regulation 200-1, *Environmental Quality, Environmental Protection and Enhancement*, Chapter 15-6, and generally recognized industry practices.

This Executive Summary presents a description of the buildings on the Property, a brief description of historical Property use, and recognized environmental conditions or areas of environmental concern that could potentially impact the environmental condition of the Property. Other areas of potential environmental concern are outlined in the remainder of this document.

The Property evaluated during the course of this EBS encompasses approximately 4.65 acres. The USARC provides organizational and limited direct support maintenance, and technical assistance for Army Reserve units located in the region. Light maintenance at the Property includes support of military vehicles and military equipment. The Property is currently occupied by the 428<sup>th</sup> Quarter Master Company and 319<sup>th</sup> Quarter Master Battalion.

There are three buildings on the Property. A description of the structures on the Property follows:

- 2 LT William S. Huisman USARC. The 2LT William S. Huisman USARC facility is the predominant structure on the Property. It is approximately 28,950 square feet (sf) and functions mainly as offices, classrooms, and a drill hall. This building is a two-story, primarily U-shaped structure. The structure was constructed in 1962. The building is underlain with a concrete foundation. It is constructed of concrete block walls that have been finished with red bricks. Fluorescent lighting is used throughout the building. Floor covering is typically tile with the exception of finished concrete floors in the drill hall and caged storage areas.
- Organizational Maintenance Shop (OMS). The OMS on the Property is a rectangular, one-story cinder block building, with a red brick veneer. The building was constructed in 1963 and contains a slab-on-grade concrete foundation. The structure occupies approximately 6,576 sf and contains five metal overhead retractable bay doors, an administrative area, several caged storage areas, and two flammable-materials storage cabinets. The OMS is currently used to provide approximately 20% of the organizational level maintenance on equipment and vehicles that belong to the 428<sup>th</sup> and 319<sup>th</sup>, including "Level #1" vehicle maintenance (oil changes, tire changes, wheel bearing repacks, etc.). Major repairs such

as engine overhauls are referred to Area Maintenance Support Activity (AMSA) #123, located in Macedonia, Ohio. There are no floor drains in the OMS.

- Utility Building. This approximately 25 sf building functions as a storage facility for mechanical equipment used by East Ohio Gas, supplier of natural gas to the USARC. It is a half-story square building that rests on a concrete foundation with concrete block wall and a red brick facade. The building was constructed in 1962.

There is a sparse population of deciduous and coniferous trees around the main buildings and along the boundaries of the Property. Grassy, landscaped areas surround the main buildings. The central area of the Property is covered by asphalt parking areas for military and privately owned vehicles. A chain-link fence topped with barbed wire surrounds the OMS and Military Equipment Parking (MEP) area. Access to the buildings is only gained with proper identification.

Based on documents provided by the 88<sup>th</sup> RRC, the Property was purchased by the Department of the Army from the City of Cleveland in 1961. The 88<sup>th</sup> RRC is the current owner of the Property. Based on the legal description, the Property is situated in the Township of Warrensville, County of Cuyahoga, and the State of Ohio, and known as being part of the original Warrensville Township Lot No. 69, containing approximately 4.65 acres of land. The latitude/longitude of the Property is 41° 27' 0.0"N, 81° 30' 1.4"W. Adjacent properties are discussed in Section 4.0 of this report.

Based on the information revealed in this EBS, IMA-ARD identified **no recognized environmental conditions** that negatively impact the environmental condition of the Property. There were, however, two environmental concerns related to the Property. They are as follows:

#### Environmental Concerns

- Asbestos Containing Materials. An *Asbestos, PCB, Lead-Based Paint, and Radon Survey* (March 2004) was prepared by ITI of South Florida, Inc. (ITI) for the USARC and OMS on the Property. Asbestos Containing Materials (ACMs) were identified at the following locations:

#### USARC

##### Confirmed Asbestos

- Thermal system insulation located through the building (pipes and fittings)
- Water tank insulation and associated pipes in boiler room
- 9" x 9" floor tile and mastic located throughout
- Exterior expansion joints between bricks

##### Presumed Asbestos

- Cloth expansion joints
- Door putty
- Fire doors
- Electrical wiring



## OMS

### Presumed Asbestos

- Cloth wrap around flue pipe (6 inches) about bay door #2 (from left)
- Cloth expansion joint
- Exterior joint putty between bricks
- Fire doors
- Electrical wiring
- Roofing Materials

Localized damage of thermal system insulation was observed in some areas, especially at elbows and joints.

- Lead-Based Paint. An *Asbestos, PCB, Lead-Based Paint, and Radon Survey (March 2004)* was prepared by ITI for the USARC and OMS on the Property. Lead-Based Paint (LBP) was identified at the following locations:

## USARC

- All metal door jambs located throughout, brown with red tint (good condition)
- All painted components of staircases, brown and cream on metal (fair to damaged condition)
- All painted metal columns and beams and associated corrugated metal deck, cream color (good condition)
- Metal doors in the drill hall and copy entrance areas, brown with a red tint (fair condition)
- Chalk board in the drill hall (good condition)
- Exterior garage door frame/jamb, metal, grey (damaged condition)
- Ceramic tile walls in all restrooms, 1<sup>st</sup> and 2<sup>nd</sup> floor (good condition)
- Glazed block in room 209, janitor's closet (good condition)
- Green metal ladder in Rom 209, janitor's closet (good condition)

## OMS

- Exterior metal door jambs on garage doors (damaged condition)
- Yellow paint on floor, west door (significantly damaged)
- All metal beams and columns, yellow and white in color (fair condition)

## Environmental Condition of Property

This EBS classified the Property into one of seven Department of Defense (DoD) Environmental Condition of Property (ECP) categories as defined by ASTM Designation D5746-98 (2002), *Standard Classification of Environmental Condition of Property Area Types for Defense Base Closure and Realignment Facilities*. Property classification categories are defined in Section 2.3 of this EBS.

The Property has been classified as category Type 2. This category is defined as *"an area or parcel of real property where only the release or disposal of petroleum products or their derivatives has occurred."* This classification was selected based on the identification of petroleum-impacted soils during the removal and closure of a 550-gallon underground storage tank. Total Petroleum Hydrocarbons (TPH) were detected in one of the soil samples at 210 milligrams per kilogram (mg/kg), below the determined action level of 904 mg/kg (see Section 6.4.1).

## SECTION 2.0 SCOPE OF SERVICES

### 2.1 OBJECTIVES AND METHODOLOGY

IMA-ARD prepared this EBS for the Property and all of the properties within the minimum search distances specified under ASTM E 1527-00, ASTM D 6008-96, and Army Regulation 200-1 standards.

The objective of the EBS was to identify *recognized environmental conditions* by reviewing the Property history, including review of: historical aerial photographs; city directories; regulatory agency records; and historical reports. Interviews with persons knowledgeable about the Property and a site reconnaissance were also conducted. A recognized environmental condition is defined as *the presence or likely presence of hazardous substances or petroleum products under conditions that indicate an existing release, a past release, or a material threat of a release on the surface of the Property, or into the ground, groundwater, or surface water of the property. The term does not include de minimis conditions that generally do not represent a material risk of harm to public health or the environment, and that generally would not be the subject of a regulatory enforcement action.*

This EBS was performed in a manner that allowed for the identification of recognized environmental conditions at the Property, those concerns ascertained through visual and physical observations, and information-gathering procedures.

The following tasks were performed during the course of this EBS:

- A site reconnaissance for evidence of hazardous materials handling, storage, or disposal, and other potential contaminants, or practices that may have affected the property.
- An evaluation of the surrounding properties within the designated ASTM radii, with respect to their potential to impact the environmental integrity of the Property. This evaluation was limited to (a) evidence readily observable without accessing the neighboring properties and (b) data that may be obtained from federal, state, and local regulatory agency files via use of an electronic database search supplied by Environmental Data Resources (EDR).
- Review of reasonably available historical data (e.g., historical environmental reports, aerial photographs, and city directories), topographical and hydrogeological information, and other information, as appropriate.
- Interviews with persons knowledgeable of the Property.

The site reconnaissance for this EBS was conducted on February 24, 2004, by Mr. Michael Dickinson, Hydrogeologist/Environmental Property Assessor contractor for IMA-ARD. Ms. Nikki Foster, State Environmental Manager TAD-PGS contractor for the 88th RRC, provided Property access.



## 2.2 INFORMATION SOURCES

IMA-ARD personnel reviewed the following applicable documents in the course of this EBS:

Document	Source
Road Map of the Area	Rand McNally.com
USGS 7.5-Min. Topographic Map – Shaker Heights, Ohio Quadrangle, 1979	Topozone.com
Aerial Photographs of the Property and Surrounding Area (1952, 1962, 1977, 1991, and 2002)	EDR, GlobExplorer.com
City Directories for the Property and the Surrounding Area (1967, 1976, 1997)	EDR
Legal Description of the Property	88th RRC
Condemnation Documents, USACOE, October 1999	88th RRC
Project Report – Range Cleanup – OH066, 88 <sup>th</sup> RSC, Huisman USARC, Warrensville Heights, Ohio, IT Corporation, Feb	88th RRC
Ohio Section 110 Inventory Report, Fort McCoy Archaeology Laboratory, December 1999	88th RRC
Floor Plans of Buildings on the Property, 1987	88th RRC
Specifications for Oil/Water Separator Closure at Huisman USARC (OH066), Warrensville Heights, Ohio, Jones Technologies, Inc., October 2000	88th RRC
Final OWS System Closure Report, Huisman USARC (OH066), Warrensville Heights, Ohio, Jones Technologies, Inc., October 2001	88th RRC
Closure Assessment Report for Waste Oil Underground Storage Tank at 2 LT WM S Huisman USARC Facility, Warrensville Heights, Ohio, Harza Environmental Services, Inc., January 1999	88th RRC
Cross Connection/Backflow Prevention Program for the 88 <sup>th</sup> RSC Facilities in Ohio, Dosson-Stilson, Inc., January 1997	88th RRC
Miscellaneous As-Built Drawings for the Property	88th RRC
Final Oil/Water Separator Evaluation Report, 88 <sup>th</sup> RSC, Ohio, Jones Technologies, Inc., December 1998	88th RRC
Correspondence between Harza Environmental Services, Inc. and Division of State Fire Marshall, Bureau of Underground Storage Tank Regulations, May 1999	88th RRC

Document	Source
Environmental Compliance Assessment for 2 LT William S. Huisman USAR Center, Facility Engineering Team #1, 83 <sup>rd</sup> ID Memorial USAR Center, October 2002	88th RRC
Asbestos Survey Report, Huisman USARC, Warrensville Heights, Ohio, RMT, November 1992	88th RRC
Environmental Survey Report – Asbestos, PCB, Lead Based Paint and Radon Survey, 88 <sup>th</sup> Regional Support Command, Warrensville, Ohio (OH066)	88th RRC
Radon Survey Results, 83 <sup>rd</sup> ARCOM, June 1993	88th RRC
Final Installation Spill Contingency Plan, Huisman USARC, Warrensville, Ohio, Jones Technologies, Inc., May 1998	88th RRC
Draft Boiler Surveys, Air Emission Inventories, and Hazardous Materials Inventories, U.S. Army Reserves, Columbus, Ohio, Dames & Moore, April 1994	88th RRC
Record of Environmental Consideration for Right-of-Way Easment, Huisman USARC, Warrensville, Ohio (OH066), September 1997	88th RRC
Excerpts from Draft 88 <sup>th</sup> RRC Natural Resources Survey, February 2004	88th RRC
Geology, Hydrogeology, and Soils Data for the Property and Surrounding Area	EDR
Electronic Regulatory Agency File Database	EDR

With the exception of the as-built drawings, all environmental documents have been copied to an electronic disk and are included as an attachment in this report. In addition, substantive information about the Property and the surrounding area was obtained from interviews with the following persons:

- Ms. Lisa Gulbranson, 88th RRC, TAD-PGS Contractor
- Ms. Nikki Foster, 88th RRC, TAD-PGS Contractor
- Mr. Robert Healey, Supervisory Staff Administrator, 319<sup>th</sup> Quarter Master Battalion

## 2.3 ENVIRONMENTAL CONDITION OF THE PROPERTY CATEGORIES

The EBS classifies the Property into one of seven DoD Environmental Condition of Property (ECP) categories as defined by ASTM Designation D5746-98, *Standard Classification of Environmental Condition of Property Area Types for Defense Base Closure and Realignment Facilities*. The property classification categories are described in detail below:



- ECP Area Type 1: An area or parcel of real property where no release or disposal of hazardous substances or petroleum products or their derivatives has occurred (including no migration of these substances from adjacent properties).
- ECP Area Type 2: An area or parcel of real property where only the release or disposal of petroleum products or their derivatives has occurred.
- ECP Area Type 3: An area or parcel of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred, but at concentrations that do not require a removal or remedial action.
- ECP Area Type 4: An area or parcel of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred, and all remedial actions necessary to protect human health and the environment have been taken.
- ECP Area Type 5: An area or parcel of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred and removal or remedial actions, or both, are under way, but all required actions have not yet been taken.
- ECP Area Type 6: An area or parcel of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred, but required response actions have not yet been initiated.
- ECP Area Type 7: An area or parcel of real property that is unevaluated or requires additional evaluation.

ECP Area Types 1 through 4 are suitable for lease or transfer by deed. ECP Area Types 5 and 6 are typically unsuitable for lease or transfer by deed because of ongoing or yet to be initiated remedial actions. ECP Area Type 7 is unevaluated or requires additional evaluations.

## **2.4 LIMITATIONS**

This EBS was performed in accordance with ASTM E 1527-00, ASTM D 6008-96, and Army Regulation 200-1. This EBS included available historical sources, including previous environmental documents, historical aerial photographs, city directories, and interviews with persons knowledgeable about Property activities. It should be noted that the ground surface was partially snow covered at the time of the site reconnaissance, thereby reducing the effectiveness of personal observation of staining, spills, or stressed vegetation on the subject property.

Although this study has been a reasonably thorough attempt to identify the potential sources of contamination for the Property, there is always the possibility that some sources of contamination have escaped detection due to the limitations of this study, the inaccuracy of government records, or the presence of undetected and unreported environmental events. IMA-ARD environmental personnel have performed this EBS using the degree of care and skill



ordinarily exercised under similar conditions by other reputable environmental professionals practicing in this or similar localities.

## SECTION 3.0 PROPERTY DESCRIPTION

### 3.1 PROPERTY NAME

2LT William S. Huisman USARC.

### 3.2 PROPERTY ADDRESS

The Property is located at 25445 Harvard Road in Warrensville Heights, Cuyahoga County, Ohio. The Property lies on the north side of the road, approximately 1,000 feet west of the intersection of Richmond Road and Harvard Road (see Attachments A and B – Property Location Map and Property Sketch). The mailing address for the facility is as follows:

2LT William S. Huisman USARC  
25445 Harvard Road  
Warrensville Heights, Ohio 44122

### 3.3 PROPERTY SIZE

Based on a review of the legal description provided by the 88th RRC, the Property encompasses approximately 4.65 acres.

### 3.4 CURRENT IMPROVEMENTS AND USES

The USARC currently provides organizational and limited direct support maintenance, and technical assistance for supported Army Reserve units located in the region. Light maintenance at the site includes support of military vehicles and military equipment. The Property is currently occupied by the 428<sup>th</sup> Quarter Master Company and 319<sup>th</sup> Quarter Master Battalion.

There are three buildings on the Property. A description of the structures on the Property follows:

- 2 LT William S. Huisman USARC. The 2LT William S. Huisman USARC facility is the predominant structure on the Property. It is approximately 28,950 square feet (sf) and functions mainly as offices, classrooms, and a drill hall. This building is a two-story, primarily U-shaped structure. The structure was constructed in 1962. The building is underlain with a concrete foundation. It is constructed of concrete block walls that have been finished with red bricks. Fluorescent lighting is used throughout the building. Floor covering is typically tile with the exception of finished concrete floors in the drill hall and caged storage areas.
- Organizational Maintenance Shop (OMS). The OMS on the Property is a rectangular, one-story cinder block building, with a red brick veneer. The building was constructed in 1963 and contains a slab-on-grade concrete foundation. The structure occupies approximately 6,576 sf and contains five metal overhead retractable bay doors, an administrative area, several caged storage areas, and two flammable-materials storage cabinets. The OMS is currently used to provide approximately 20% of the organizational level maintenance on equipment and vehicles that belong to the 428<sup>th</sup> and 319<sup>th</sup>,

including "Level #1" vehicle maintenance (oil changes, tire changes, wheel bearing repacks, etc.). Major repairs such as engine overhauls are referred to Area Maintenance Support Activity (AMSA) #123, located in Macedonia, Ohio. There are no floor drains in the OMS.

- Utility Building. This approximately 25 sf building functions as a storage facility for mechanical equipment used by East Ohio Gas, supplier of natural gas to the USARC. It is a half-story square building that rests on a concrete foundation with concrete block wall and a red brick facade. The building was constructed in 1962.

There is a sparse population of deciduous and coniferous trees around the main buildings and along the boundaries of the Property (see Attachment C – Photographs). Grassy, landscaped areas surround the main buildings. The central area of the Property is covered by asphalt parking areas for military and privately owned vehicles. A chain-link fence topped with barbed wire surrounds the OMS and Military Equipment Parking (MEP) area. Access to the buildings is only gained with proper identification.

### **3.4.1 Utilities**

According to Mr. Robert Healy, Supervisory Staff Administrator for the 319<sup>th</sup> Quarter Master Battalion, the City of Beachwood supplies the Property with potable water and sanitary sewer service. First Energy provides electricity to the Property and East Ohio Gas supplies the Property with natural gas. According to Mr. Healy, there are no septic tanks on the Property (see Attachment D – Record of Communication).

## **3.5 PROPERTY HISTORY**

### **3.5.1 Previous Environmental Assessments of the Property**

Based on a review of documents provided by the 88<sup>th</sup> RRC, a Phase I Environmental Assessment or EBS has not been performed for the Property previously. However, several site specific environmental documents were reviewed as part of this EBS. They have been included on an electronic disk in this report (see Attachment E – Research Documents).

### **3.5.2 Occupancy and Uses of the Property**

IMA-ARD reviewed several sources of historical information with regard to the Property, including historical aerial photographs, city directories, and information supplied by interviews (see Attachment D).

Based on documents provided by the 88<sup>th</sup> RRC, the Property was purchased by the Department of the Army from the City of Cleveland in 1961. Prior to 1961, the Property was apparently vacant, open grassland, making up a portion of land used by the Department of the Army for NIKE missile operations.

A review of historical aerial photographs for the Property corroborates this information in that they show the Property as open grassland from the date of the earliest aerial photograph (1952). The next available aerial photograph is from 1962 and shows the USARC and OMS in generally the same locations as they exist today. The MEP area has not been constructed in the 1962 photograph and the asphalt drive has not been constructed. The 1977 and 1991 aerial photographs show the addition of the asphalt boundaries of the MEP and POV parking areas.



The 2002 aerial photograph shows the Property in generally the same condition as it exists today.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1967 through 1997. The Property is listed as the US Department of Defense Army Reserve Center from the earliest listing (1967). According to the city directories, the USARC has occupied the Property continuously until the last listing in 1997.

### 3.5.3 Occupancy and Uses of Nearby Land Use

At the present time, the land to the south is occupied by Cuyahoga Community College. Undeveloped commercial property, owned by Chagrin Highlands Development Company, borders the site to the north, east, and west (see Attachment B).

The 1952 aerial photograph of the area surrounding the Property to the north and east indicate the land was used for military support buildings (command rooms, commissary, living quarters, offices, etc.) as part of NIKE missile operations. Adjacent property to the west was occupied by a military hospital (closed in approximately 2000, according to Mr. Healey) in the 1952 photograph and open grasslands were observed to the south. The development of Harvard Road can be seen in the 1962 photograph, with adjacent properties remaining generally unchanged. In the 1977 aerial photograph, the military support buildings to the north and east have been demolished and construction of Cuyahoga Community College is apparent to the south. The 1991 aerial photograph shows the continued development of Cuyahoga Community College to the south. The military hospital is missing from the 2002 aerial photograph and surrounding properties are in generally the same condition as they exist today. A review of the city directories for surrounding properties identified the U.S. Department of Defense Army Area Supply Office (25950 Harvard Road), Cuyahoga Community College (25444 Harvard Road), and the Highland Hills Fire Department (25441 Harvard Road).

### 3.5.4 Review of Aerial Photographs

Available aerial photographic coverage of the Property included photographs dated 1952, 1962, 1977, 1991, and 2002. These aerial photographs are included in Attachments F-1 through F-5. A summary of the information obtained from an analysis of these photographs is as follows:

<b>1952 Aerial Photograph EDR</b>	This aerial photograph shows the Property as vacant open grassland. Surrounding properties to the north, northeast, and east house military buildings in support of the NIKE missile operation. Land to the south is vacant and a military hospital is present east of the Property (see Attachment F-1).
<b>1962 Aerial Photograph EDR</b>	This photograph shows the Huisman USARC and OMS on the Property in generally the same locations as they exist today. The development of Harvard road is visible to the south. Land use to the north, east and west has remained relatively unchanged since the 1952 photograph. The presence of the NIKE missile silos, southeast of the Property is evident in this photograph (see Attachment F-2).

<b>1977 Aerial Photograph EDR</b>	This photograph shows the Property in generally the same condition as the 1962 photograph with the exception of paving in the POV and MEP areas. Military housing to the north, east have been demolished and construction of the Cuyahoga Community College is evident to the south of Harvard Road (see Attachment F-3).
<b>1991 Aerial Photograph EDR</b>	With the exception of continued development of Cuyahoga Community College south of Harvard Road, the Property and surrounding areas have remained relatively unchanged since the 1977 photograph. The former NIKE missile silos, southeast of the Property were closed at the time this photograph was taken (see Attachment F-4).
<b>2002 Aerial Photograph, GlobExplorer®</b>	This photograph shows the Property and surrounding properties in generally the same condition as they exist today. The military hospital, formerly east of the Property has been removed. Undeveloped commercial property borders the site to the north, east, and west (see Attachment F-5).

## **SECTION 4.0 ADJACENT PROPERTIES**

Attachment F-5 provides an aerial view of land that surrounds the Property. The Property is bounded to the north, east and west by undeveloped commercial property owned by Chagrin Highlands Development Company. Harvard Road borders the site to the south. Further south of Harvard Road is Cuyahoga Community College. The photographs below illustrate adjacent properties:

### **North**

Undeveloped commercial land borders the Property to the north. The photograph to the right was taken from the northern portion of the MEP, viewing north.



### **South**

Harvard Road borders the Property to the south. Cuyahoga Community College lies further south of Harvard Road. The photograph to the left shows Harvard Road with the Community College in the background





## East

Undeveloped commercial land borders the Property to the east. The photograph to the left was taken from the east side of the OMS, viewing east. Further east is I-271.



## West

Undeveloped commercial property borders the Property to the west. The photograph on the left shows the western fence line with the undeveloped commercial property in the background. The photograph on the right was taken viewing north and shows the western fence line of the MEP area and the undeveloped commercial property on the left side of the photograph.

## **SECTION 5.0 ENVIRONMENTAL SETTING**

### **5.1 TOPOGRAPHY AND SURFACE WATER**

The Property lies in a gently rolling area with a land surface elevation of approximately 1,216 feet above mean sea level, based on the National Geodetic Vertical Datum (NGVD) of 1929. Based on surface topography and a visual inspection of the Property, storm water generally flows towards the southeast in the direction of an unnamed tributary, located approximately 2,500 feet southeast of the Property. This unnamed tributary flows toward the south-southeast (see Attachment G – U.S.G.S. Topographic Quadrangle Map).

Adjacent properties to the north and west are topographically upgradient of the Property. Based on the fact that these properties are undeveloped and had no noticeable outside storage of liquid chemicals (e.g., drums or hazardous waste storage areas) at the time of the site reconnaissance, it does not appear that storm water runoff from these adjacent properties would negatively impact the environmental condition of the Property. Adjacent properties to the east and south are located topographically downgradient and would not drain stormwater onto the Property.

### **5.2 WETLANDS**

The United States Army Corp of Engineers (USACE) and Environmental Protection Agency (EPA) jointly define wetlands as *“Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.”*

National Wetland Inventory coverage was not available for the Property. Based on a review of the Draft 88<sup>th</sup> RRC Natural Resources Survey completed for the Property, no wetlands were observed on or in the immediate vicinity of the Property. It should be noted that a wetlands delineation study was not conducted as part of this EBS.

### **5.3 100-YEAR FLOOD ZONE**

A review of the Overview Map 1136980.3s indicates that the site does not lie inside the 100-year flood zone (see Attachment H – EDR Database Report)

### **5.4 GEOLOGIC INFORMATION**

Based on a review of documents provided by the 88<sup>th</sup> RRC, most of Cuyahoga County geology was formed from Wisconsin-age glacial till, glacial outwash, beach deposits, lacustrine sediments, recent stream alluvium and locally accumulated organic material. According to the EDR, the Property overlies a stratified sequence of deposits of the Paleozoic Era, Mississippian System, Mississippian Series (see Attachment H).

### **5.5 HYDROGEOLOGIC INFORMATION**

Groundwater flow direction has been estimated to be towards the southeast in the direction of an unnamed tributary, based on a review of the 7.5-minute U.S.G.S. topographic



map of the area. It should be noted that this groundwater flow direction is not known with certainty and cannot be determined without the installation of monitoring wells and/or piezometers on the Property.

## **5.6 SOIL CHARACTERIZATION**

According to the U. S. Department of Agriculture's Soil Conservation Service data, the prominent soil type at the Property has been identified as MAHONING. This classification consists of silty loam that has very slow infiltration rates. Soils are clayey, have a high water table, and commonly have a layer with low hydraulic conductivity. Depth to water table is 1 to 3 feet. Depth to bedrock is greater than 60 inches (see Attachment H).

## **SECTION 6.0**

### **SITE RECONNAISSANCE AND INTERVIEWS**

#### **6.1 SITE OBSERVATIONS**

##### **6.1.1 INSPECTOR/INSPECTION DATE**

Environmental professional, Mr. Michael Dickinson performed the site reconnaissance on February 24, 2004. Mr. Dickinson is a Hydrogeologist/Environmental Property Assessor contractor for the IMA-ARD and has over ten years of experience in the environmental field. Ms. Nikki Foster, Ohio State Environmental Manager, TAD-PGS contractor for the 88<sup>th</sup> RRC, provided Property access.

##### **6.1.2 Site Access and Egress**

There is only one access drive leading to the Property (from Harvard Road). The MEP area is bound by a chain-link fence topped with barbed wire. Access to the buildings is restricted to personnel with proper identification.

##### **6.1.3 Wells**

###### **6.1.3.1 Drinking and/or Irrigation Wells**

There are no drinking wells or irrigation wells on the Property.

###### **6.1.3.2 Dry Wells**

No visual or physical evidence of dry wells was discovered on the Property.

##### **6.1.4 Pits, Ponds, and Lagoons**

Visual inspections for pits, ponds, and lagoons, particularly those used in connection with waste disposal or waste treatment, were conducted. None were noted at the time of the visual inspection of the Property. There was no visual evidence that the area was currently or had been used for waste disposal in the past.

##### **6.1.5 Mounds or Depressions**

A visual inspection was conducted to identify areas apparently filled or graded by other than natural means (or filled by unknown origins), mounds, or depressions suggesting trash or other solid waste disposal. No mounds or depressions were observed during the visual inspection of the Property.

##### **6.1.6 Vegetation/Wooded Areas**

The Property is approximately ten percent landscaped with grassy areas/native plants and decorative shrubs. MEP and POV parking areas, driveways, and building footprints occupy the remainder of the Property.

##### **6.1.7 Buildings and Other Structures**

The buildings on the Property have been previously discussed in Section 3.0.

#### **6.1.8 Septic Systems**

According to Mr. Robert Healey, Supervisory Staff Administrator for the 319<sup>th</sup> Quarter Master Battalion, the Property is serviced exclusively by sanitary sewer. Mr. Healey stated that there are no septic tanks on the Property.

#### **6.1.9 Solid Waste Disposal**

At the time of the visual inspection of the Property, there was one solid waste dumpster on the site. According to Mr. Healey, the solid waste dumpster is routinely emptied by BFI, Inc. No staining or unusual odors were observed in or around the solid waste dumpster.

#### **6.1.10 Evidence of Air Emissions/Odors**

No unusual odors were noted during the reconnaissance of the Property. Based on a review of the *Draft Boiler Surveys, Air Emission Inventories, and Hazardous Material Inventories*, the boiler at the Property is a natural gas fired boiler that is small enough (<10 MMBtu/hr heat input) to be exempt from Permit To Install (PTI) requirements pursuant to OAC 3745-31-03 (A) (1) (a). Permit to Operate (PTO) requirements pursuant to OAC 3745-35 mandate that a permit shall be obtained for any "air contaminant source", which is loosely defined as any physical facility that "emits or may emit any air pollutant". Though no "de minimis" value for PTO permitting requirements has been promulgated, a proposed rule that is being implemented in some of the OEPA district offices exempts any air contaminant source emitting less than 10 lb/day of any criteria air pollutant (per ORC 3704.111). The boiler on the Property falls well below the 10lb/day limit.

#### **6.1.11 Evidence of Wastewater Discharge**

No wastewater discharge, other than sanitary wastewater, was observed on or adjacent to the Property during the site reconnaissance. An oil/water separator (OWS) was previously located on the Property and is discussed below in Section 6.5.

#### **6.1.12 Evidence of Monitoring Wells or Environmental Remedial Activities**

No monitoring wells were observed on the Property during the site reconnaissance.

#### **6.1.13 Evidence of Stained or Discolored Soil or Dead, Distressed, Discolored, or Stained Vegetation**

No stained or discolored soil or distressed vegetation was observed during the site reconnaissance. It should be noted that the ground surface was partially snow covered at the time of the site reconnaissance, thereby reducing the effectiveness of observations of staining, spills, or distressed vegetation on the Property.

#### **6.1.14 Evidence of Leachate or Seeps**

None were observed during the site reconnaissance.



#### **6.1.15 Evidence of Chemical/Petroleum Spills or Releases**

No evidence of past chemical/petroleum spills or releases was observed during the site reconnaissance. The Final installation Spill Contingency Plan, Huisman USARC was available for review during the site reconnaissance. According to Mr. Healey, the methods outlined in the plan are enforced at the facility.

#### **6.1.16 Hydraulic Equipment**

No permanently installed hydraulic equipment was identified at the Property. According to Mr. Healey, the OMS was never equipped with a hydraulic lift.

#### **6.1.17 Evidence of Farm Waste Concerns**

No such evidence was observed.

#### **6.1.18 Evidence of Excessive Use of Pesticides, Herbicides, Soil Conditioners, or Fertilizers**

With the exception of minimal amounts of commercially-available products used by landscape/pest-control personnel, no excessive use of any of these chemicals were noted at the time of the site reconnaissance.

#### **6.1.19 Other Concerns**

None.

### **6.2 AREA RECONNAISSANCE**

The Property and the properties immediately surrounding the site have been described previously. It should be noted that a former NIKE missile launch area was formerly located in the southeast quadrant of the intersection of Richmond Road and Harvard Road, approximately 1,500 feet southeast and downgradient of the Property. The former launch area can be seen in the 1962 and 1977 aerial photographs, but has been removed in the 1991 aerial photograph (see Attachment F).

### **6.3 HAZARDOUS SUBSTANCES AND PETROLEUM PRODUCTS IN CONNECTION WITH IDENTIFIED USES**

Visual and physical inspections for hazardous substances and petroleum products were also conducted. The Property is listed under EPA's Resource Conservation and Recovery Information System (RCRIS) as a Small Quantity Generator (SQG), EPA ID# OH9210090040. A SQG is defined as a site which generates between 100 kilograms (kg) and 1,000 kg of hazardous waste per month.

Based on information supplied by the 88<sup>th</sup> RRC, the Property is listed as a SQG based on the generation of waste from vehicle maintenance at the OMS. Typical wastes noted during the site reconnaissance were: used oily rags, used fuel and oil filters, used fuel, lamps (used), paint cans, used antifreeze, used motor oil, and other vehicle maintenance waste. Chemicals stored at the OMS include: 5-gallon containers of fuel, motor oil, brake fluid, gear oil, lubrication oil, flux paste, silicone compound, multi-purpose grease, aerosol spray paints, as well as other typical vehicle maintenance fluids.

There is one hazardous material storage sheds at the site, adjacent to the OMS. In addition, there are two flammable storage cabinets located inside the OMS. All petroleum products and hazardous substances were properly stored in the hazardous material storage shed or flammable storage cabinets at the time of the inspection (see Attachments B and C).

No improper storage techniques or staining was noted in or around the hazardous materials storage sheds or flammable storage cabinets. In addition, no violations were noted in the EDR report relating to the facility's SQG hazardous waste permit. Based on a visual inspection, it appears that petroleum products and hazardous waste is being handled properly at the Property and the storage of these relatively small quantities does not appear to pose an environmental threat to the Property at this time.

#### **6.4 STORAGE TANKS**

##### **6.4.1 On-Site AST/UST Systems**

A visual inspection was undertaken to locate any aboveground storage tanks (ASTs) or underground storage tanks (USTs) on the Property. Evidence of USTs, including vent pipes, fill pipes, concrete pads, and access ways were investigated. Based on a visual inspection and an interview with Mr. Healey, Supervisory Staff Administrator for the 319<sup>th</sup> Quarter Master Battalion, there are no ASTs or USTs currently located on the Property. However, one waste oil UST existed on the Property in the past.

According to the *Closure Assessment Report for Waste Oil Underground Storage Tank as 2 LT WM S Huisman USARC Facility, Warrensville Heights, OH*, dated January 1999, one 550-gallon waste oil UST was located on the Property as part of an OWS system. Waste oil, collected after washing vehicles, drained into an OWS where the oil and water were separated by gravity and flotation. The oil, floating on top of water, flowed through a sloped PVC pipe into the waste oil UST. The waste oil UST was removed by Harza Environmental Services, Inc. on October 29, 1998. Upon removal of the UST from the ground, the tank was observed in good condition and no holes were observed. A total of approximately 1,200 gallons of waste oil and water mixture, perched water in the excavation hole, sludge and rinsate were removed from the UST/excavation during removal activities.

Three soil samples were collected as part of the site assessment for permanent UST closure by removal. Two grab samples were collected from the excavation floor, one at each end of the UST, and one grab sample was collected from the excavated backfill material. All soil samples were analyzed for Volatile Organic Compounds (VOCs) using EPA Method 8260 and for Total Petroleum Hydrocarbons (TPH) using EPA Method 418.1R.

No VOCs were detected in any of the soil samples. TPH was detected in one of the soil samples at 210 mg/kg, below the action level of 904 mg/kg. According to the closure report, the action level of 904 mg/kg was determined using the Site Feature Scoring System (SFSS) Chart (see Attachment E).

Based on these laboratory results Harza Environmental Services, Inc. recommended no further action with regards to this UST. According to the Department



of Commerce, Leaking Underground Storage Tank database, a no further action letter was issued (see Attachment H). Based on this information it does not appear the former operation of this UST has negatively impacted the environmental condition of the Property.

#### **6.4.2 Off-Site AST/UST Systems**

A visual inspection was undertaken to locate any ASTs or USTs on properties adjacent to the Property. None were identified during the site reconnaissance of the adjacent properties.

#### **6.5 OIL/WATER SEPARATORS**

There is not an OWS system currently located on the Property. However, there was one OWS associated with the former wash rack, located adjacent to the OMS prior to February 2001. Based on a review of the *Final OWS System Closure Report, Huisman USARC (OH066), Warrensville Heights, Ohio*, dated October 2001, one 515 gallon OWS was removed by Jones Technologies, Inc. on February 6, 2001. The tank was constructed of steel and had several visible holes. After removal two soil samples were collected from the floor of the excavation and submitted for the following analyses:

- TPH (diesel range and gasoline range using EPA method 8015)
- VOCs (EPA method 8260)
- Metals – barium, cadmium, total chromium, lead, nickel, and zinc (EPA method 6010), and mercury (EPA method 7471)

No TPH or VOCs were detected in the soil above laboratory detection limits. Several metals were detected including arsenic (4.92 and 10.1 mg/kg), barium (5.22 and 23.7 mg/kg), total chromium (12.1 mg/kg), and lead (3.19 and 10.4 mg/kg). None of these metal concentrations exceeded the RCRA limits for soil. Jones Technologies, Inc. selected limits based on the most restrictive regulation because there is no specific regulation that covers flow-through devices such as an OWS.

Based on this information, it does not appear that the former operation of this OWS system negatively impacted the environmental condition of the Property.

#### **6.6 TRANSFORMERS AND PCB-CONTAINING EQUIPMENT**

Polychlorinated biphenyls (PCBs) were produced in the United States from 1929 to 1976, primarily for use as insulating material in electrical equipment such as transformers and lighting ballasts. Although PCBs are no longer being manufactured, electrical transformers, hydraulic equipment, and lighting ballasts containing PCBs may still be in service.

An *Asbestos, PCB, Lead Based Paint, and Radon Survey* was conducted in March 2004 for the Property by ITI of South Florida, Inc. (ITI). According to the survey, light ballasts in the USARC and OMS are assumed to contain PCBs based on several ballasts not having a "Non PCBs" label attached to it. The report stated that additional testing of the ballasts should be performed prior to disturbance or disposal.

The survey also identified three pole-mounted transformers behind the USARC. There were no markings on the pole-mounted transformers and they are presumed to contain PCBs. However, all transformers were noted in good condition and no leaks were evident from the units at the time of the inspection. According to Mr. Healey, the transformers are owned by First Energy and the oil in the units was replaced with non-PCB containing oil in the 1990s. The PCB survey concluded "an imminent PCB hazard was not present at the facility during the site visit". Based on this information, the operation of these transformers does not appear to negatively impact the environmental condition of the Property at this time.

## **6.7 RADON**

According to the EPA Radon Zone for Cuyahoga County, areas tested were classified in Zone 2, defined as having an indoor average level equal to or greater than 2 pCi/L and less than or equal to 4 pCi/L. In June 1993, a radon survey was conducted for the facility by 83<sup>rd</sup> ARCOM. Results from this survey found radon levels < 4 pCi/L. In March 2004 an Asbestos, PCB, Lead Based Paint, and Radon Survey was conducted by ITI. Radon results were not available from this survey during the production of this EBS. According to the 88<sup>th</sup> RRC, the results would not be available until spring 2004. However, based on the information available, radon is not considered an environmental threat to the Property.

## **6.8 ASBESTOS CONTAINING MATERIAL**

The 2004 Asbestos, PCB, Lead-Based Paint, and Radon Survey report was prepared for the USARC and OMS on the Property. Asbestos-containing Materials (ACMs) were identified at the following locations:

### USARC

#### Confirmed Asbestos

- Thermal system insulation located through the building (pipes and fittings)
- Water tank insulation and associated pipes in boiler room
- 9" x 9" floor tile and mastic located throughout
- Exterior expansion joints between bricks

#### Presumed Asbestos

- Cloth expansion joints
- Door putty
- Fire doors
- Electrical wiring

### OMS

#### Presumed Asbestos

- Cloth wrap around flue pipe (6 inches) about bay door #2 (from left)
- Cloth expansion joint
- Exterior joint putty between bricks
- Fire doors



- Electrical wiring
- Roofing Materials

Localized damage of thermal system insulation was observed in some areas, especially at elbows and joints.

## 6.9 LEAD-BASED PAINT

The 2004 Asbestos, PCB, Lead-Based Paint, and Radon Survey was prepared for the USARC and OMS on the Property. Lead-Based Paint (LBP) was identified at the following locations:

### USARC

- All metal door jambs located throughout, brown with red tint (good condition)
- All painted components of staircases, brown and cream on metal (fair to damaged condition)
- All painted metal columns and beams and associated corrugated metal deck, cream color (good condition)
- Metal doors in the drill hall and copy entrance areas, brown with a red tint (fair condition)
- Chalk board in the drill hall (good condition)
- Exterior garage door frame/jamb, metal, grey (damaged condition)
- Ceramic tile walls in all restrooms, 1<sup>st</sup> and 2<sup>nd</sup> floor (good condition)
- Glazed block in room 209, janitor's closet (good condition)
- Green metal ladder in Rom 209, janitor's closet (good condition)

### OMS

- Exterior metal door jambs on garage doors (damaged condition)
- Yellow paint on floor, west door (significantly damaged)
- All metal beams and columns, yellow and white in color (fair condition)

## 6.10 LEAD DUST

The Huisman USARC was equipped with an active indoor firing range (IFR) from the 1960s until the range was closed in 1991. According to the *Range Cleanup – OH066, 88<sup>th</sup> RSC, Huisman USARC, Warrensville Heights, Ohio, Final Report*, prepared by IT Corporation and dated February 2003, a four-position range with a manual target retrieval system was located on the first floor of the USARC. During the initial inspection in September 2001, the firing line partitions had been previously removed; the posts for the target retrieval system remained; sand was present in the bullet trap; no lead shot was observed; and the floor of the range was very dirty. IFR range cleanup activities commenced on May 13, 2002 and continued until July 3, 2002. Clearance wipe sampling was conducted on August 15, 2002. Analytical results from the clearance wipe sampling were summarized in the report as follows:



- After cleaning, the range had lead levels from  $<2.5 \mu\text{g/sf}$  (twelve ceiling and wall samples) to  $82 \mu\text{g/sf}$  [firing line (floor), 003DT]. The floor outside the entrance door had a lead level of  $78 \mu\text{g/sf}$ . These results indicate that the range floor lead levels were below the clearance criteria of  $200 \mu\text{g/sf}$ .

A letter dated August 28, 2002 by IT Corporation certified that cleaning activities at the IFR successfully attained the project clearance objectives and the former range was approved for occupancy.

The Department of the Army has derived the value of  $200 \mu\text{g/sf}$  to release former indoor firing ranges as rooms that can be reoccupied as non-lead work areas. Although the range has been cleaned to below  $200 \mu\text{g/sf}$ , small amounts of lead dust may be present in the range. Any remodeling activities that may cause a release of dust on wall and floor surfaces should be undertaken in consideration of the Occupational Safety and Health Administration (OSHA) Construction Industry Standard for Lead (29 CFR 1926.62). This OSHA standard should be reviewed before any remodeling activities are conducted. The OSHA standard requires certain controls to reduce or maintain worker exposures less than the Permissible Exposure Limit (PEL) of  $50 \mu\text{g}$  of lead per cubic meter. The employer must protect the worker from lead.

#### **6.11 UNEXPLODED ORDNANCE**

No indications were found during the site reconnaissance or records review to indicate the presence of unexploded ordnance at the Property.

#### **6.12 RADIOACTIVE COMMODITIES**

A locked storage area on the first floor of the USARC was designated "RADIOACTIVE". According to Mr. Healey, this area is for the storage of chemical agent monitors, IM-93s, radiological detectors, lensatic compasses, and wristwatches, which contain small amounts of radioactive material.

## **SECTION 7.0 ELECTRONIC DATABASE SEARCH AND REGULATORY REVIEW**

An electronic database search of environmental records for the Property and surrounding properties was prepared by EDR. EDR focused on searching federal and state environmental databases and historical and current land uses to identify sites of potential environmental concern with addresses in the areas immediately surrounding the Property.

Based on a review of the 7.5-minute U.S.G.S. topographic map, groundwater flow in the vicinity of the Property is towards the southeast. It should be noted that this groundwater flow direction is not known with certainty and cannot be determined without the installation of monitoring wells and/or piezometers on the Property.

A review of the databases searched during the course of this investigation found that the subject property was listed on the inventory of Leaking Underground Storage Tanks (LUST). In addition, two other facilities were identified by the EDR database search as being within the ASTM-specified radii of the site. These sites are discussed below:

### **LUST**

Three facilities, including the Property, were identified within the ½-mile ASTM search radius of the site on the inventory of leaking underground storage tanks (LUST). The Property was listed on the inventory due to the detection TPH in one of the soil samples collected during the permanent closure of the 550-gallon waste oil UST. According to the EDR report, a No Further Action letter has been issued for the Property (see Section 6.4.1). The remaining two facilities are related to the Cuyahoga Community College Campus, located at 4250 Richmond Road, and adjacent to the Property to the south. The Cuyahoga Community College Campus is located hydraulically downgradient from the Property (assuming a southeasterly groundwater flow direction in the vicinity of the subject site). Based on this information, it does not appear that a release from this facility poses an environmental threat to the Property at this time.

Full documentation of the EDR database review is provided in Attachment H.

## SECTION 8.0 CONCLUSIONS

IMA-ARD prepared this EBS for the 88<sup>th</sup> RRC for the 2 LT William S. Huisman USARC (OH066). The Property is located at 25445 Harvard Road, on the north side of the road, approximately 1,000 feet west of the intersection of Richmond Road and Harvard Road, in Warrensville Heights, Cuyahoga County, Ohio. This EBS was developed in general conformance with the scope and limitations of ASTM Designation D6008-96, ASTM Designation E1527-00, and Army Regulation 200-1, and generally recognized industry practices. Any exceptions to, or deletions from, this practice are described in Section 2.3 of this report.

Based on the information revealed in this EBS, IMA-ARD identified **no recognized environmental conditions** that negatively impact the environmental condition of the Property. There were, however, two environmental concerns related to the Property. They are as follows:

### Environmental Concerns

- Asbestos Containing Materials. An *Asbestos, PCB, Lead-Based Paint, and Radon Survey* (March 2004) was prepared by ITI of South Florida, Inc. (ITI) for the USARC and OMS on the Property. Asbestos-containing Materials (ACMs) were identified at the following locations:

### USARC

#### Confirmed Asbestos

- Thermal system insulation located through the building (pipes and fittings)
- Water tank insulation and associated pipes in boiler room
- 9" x 9" floor tile and mastic located throughout
- Exterior expansion joints between bricks

#### Presumed Asbestos

- Cloth expansion joints
- Door putty
- Fire doors
- Electrical wiring

### OMS

#### Presumed Asbestos

- Cloth wrap around flue pipe (6 inches) about bay door #2 (from left)
- Cloth expansion joint
- Exterior joint putty between bricks
- Fire doors
- Electrical wiring
- Roofing Materials

Localized damage of thermal system insulation was observed in some areas, especially at elbows and joints.



- Lead-Based Paint. An *Asbestos, PCB, Lead-Based Paint, and Radon Survey (March 2004)* was prepared by ITI for the USARC and OMS on the Property. Lead-Based Paint (LBP) was identified at the following locations:

#### USARC

- All metal door jambs located throughout, brown with red tint (good condition)
- All painted components of staircases, brown and cream on metal (fair to damaged condition)
- All painted metal columns and beams and associated corrugated metal deck, cream color (good condition)
- Metal doors in the drill hall and copy entrance areas, brown with a red tint (fair condition)
- Chalk board in the drill hall (good condition)
- Exterior garage door frame/jamb, metal, grey (damaged condition)
- Ceramic tile walls in all restrooms, 1<sup>st</sup> and 2<sup>nd</sup> floor (good condition)
- Glazed block in room 209, janitor's closet (good condition)
- Green metal ladder in Rom 209, janitor's closet (good condition)

#### OMS

- Exterior metal door jambs on garage doors (damaged condition)
- Yellow paint on floor, west door (significantly damaged)
- All metal beams and columns, yellow and white in color (fair condition)

### Environmental Condition of Property

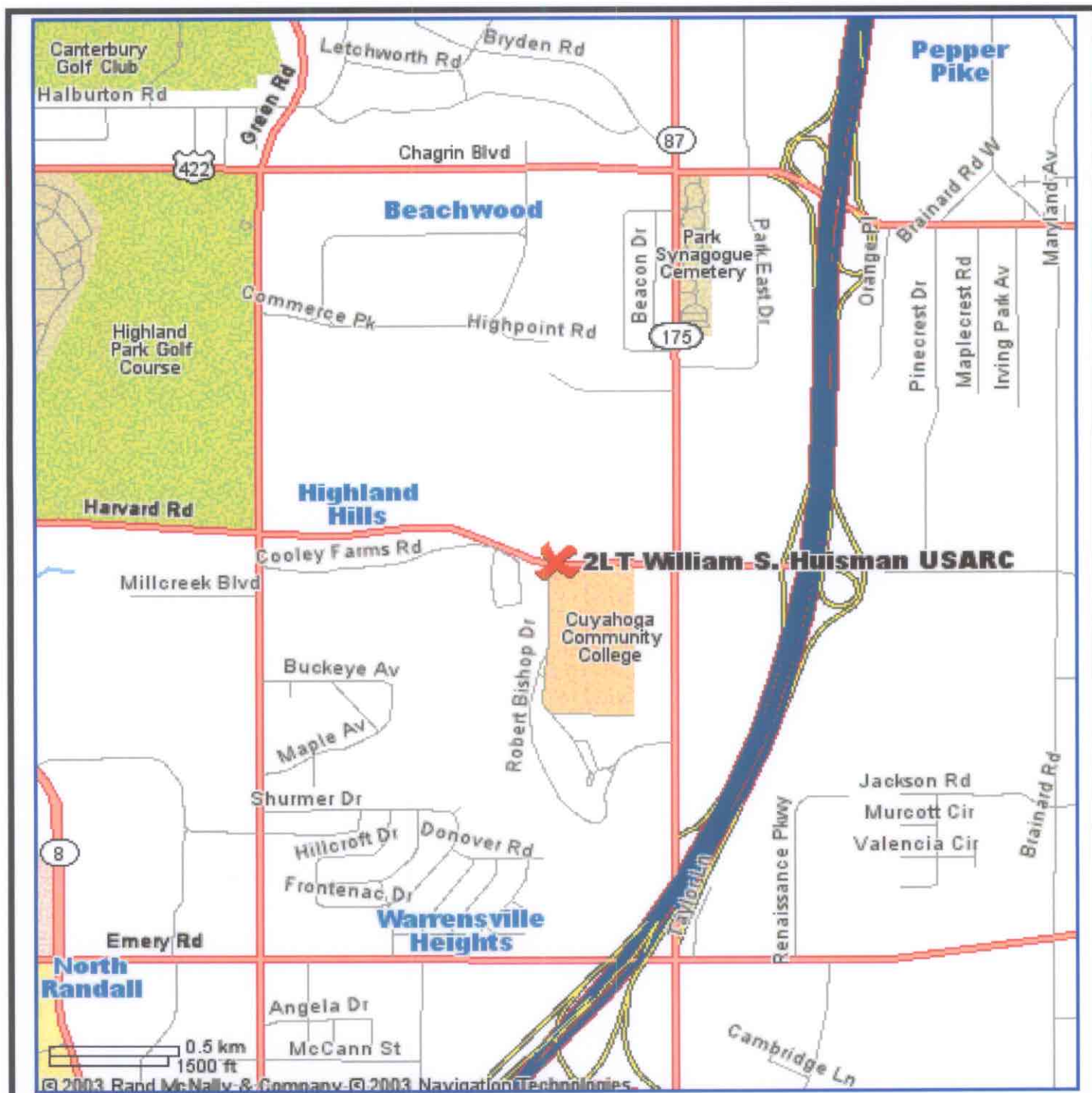
This EBS classified the Property into one of seven Department of Defense (DoD) Environmental Condition of Property (ECP) categories as defined by ASTM Designation D5746-98 (2002), *Standard Classification of Environmental Condition of Property Area Types for Defense Base Closure and Realignment Facilities*. Property classification categories are defined in Section 2.3 of this EBS.

The Property has been classified as category Type 2. This category is defined as “an area or parcel of real property where only the release or disposal of petroleum products or their derivatives has occurred.” This classification was selected based on the identification of petroleum-impacted soils during the removal and closure of a 550-gallon UST. Total Petroleum Hydrocarbons (TPH) was detected in one of the soil samples at 210 milligrams per kilogram (mg/kg), below the determined action level of 904 mg/kg (see Section 6.4.1).

---

Michael P. Dickinson  
IMA-ARD Contractor  
Hydrogeologist/Environmental Property Assessor

**ATTACHMENT A**  
**Property Location Map**

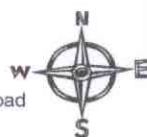


**Prepared For:**

88th RRC  
506 Roeder Circle  
Fort Snelling, MN 55111

**Location of Property:**

2LT William S. Huisman USARC, 25445 Harvard Road  
Warrensville Heights, OH 44122



Installation Management Agency,  
Army Reserve Division  
1401 Deshler Street SW  
Fort McPherson, GA 30330

Project #: 1401-11 Prepared By: MD

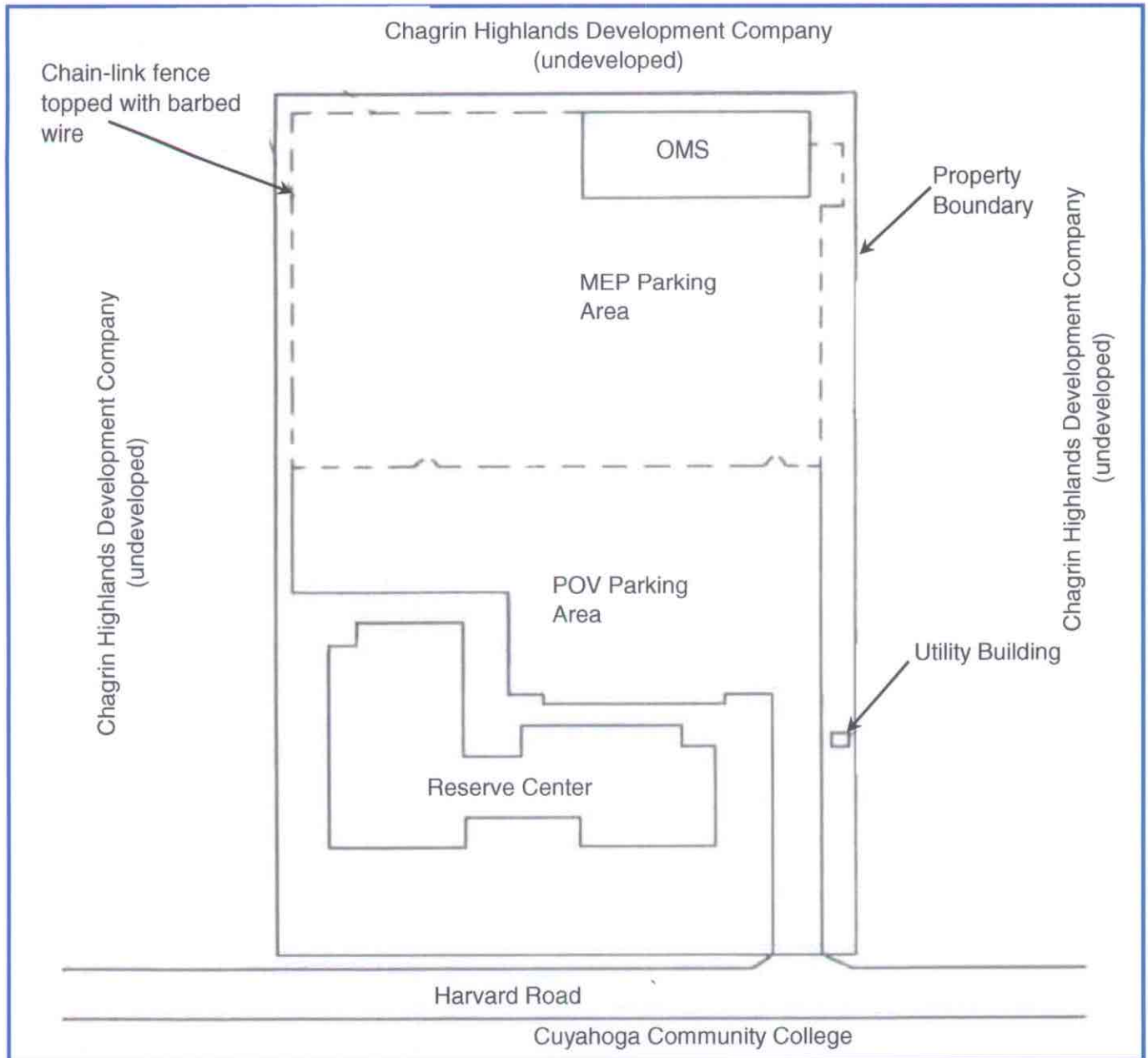
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**Property Location Map**

Attachment

**A**

**ATTACHMENT B**  
**Property Sketch**



**Prepared For:**

88th RRC  
506 Roeder Circle  
Fort Snelling, MN 55111

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Army Reserve Division  
1401 Deshler Street SW  
Fort McPherson, GA 30330**

Project #: 1401-11 Prepared By: MD

Scale: NTS Date: 2/23/2004

**Property Sketch**

Attachment

**B**



**ATTACHMENT C**  
**Photographs**



South side of Huisman USARC.



Southwest corner of Huisman USARC.



Interior of USARC.



Former Indoor Firing Range area, converted to classroom.



Drill hall inside USARC.



Boiler room inside USARC.



South side of OMS.



Interior of OMS.



Flammable materials storage cabinet inside OMS.



Utility Building.



Interior of Utility Building.



Military Equipment Parking Area.





Hazardous Materials Storage Shed located west of OMS.



Interior of Hazardous Materials Storage Shed.



Storage trailers located along eastern property boundary.



Three pole-mounted transformers, located on north side of USARC.



Solid waste dumpster on the Property.



Radiological materials cabinet inside USARC.



**ATTACHMENT D**  
**Record of Communication**

**Installation Management Agency, Army Reserve Division**  
**Record of Communication**

Date:	February 24, 2004
Job No.	1401-11
Client:	88 <sup>th</sup> RRC
Recorded By:	Michael Dickinson
Talked With:	Ms. Lisa Gulbranson, Environmental Manager
Of:	TAD-PGS Contractor for the 88 <sup>th</sup> RRC
Nature of Interview:	Telephone Interview
Phone No.:	(612) 713-3752
<b>Items Discussed</b>	
<p>Ms. Gulbranson provided copies of all site related environmental documents related to the the Huisman USARC.</p>	

**Installation Management Agency, Army Reserve Division**  
**Record of Communication**

Date:	February 24, 2004
Job No.	1401-11
Client:	88 <sup>th</sup> RRC
Recorded By:	Michael Dickinson
Talked With:	Mr. Robert Healey, SSA
Of:	319 <sup>th</sup> Quarter Master Battalion
Nature of Interview:	Telephone/On-site Interview
Phone No.:	(216) 595-0018

**Items Discussed**

Mr. Healy provided historical information with regards to the use of the Property. He escorted IMA-ARD around the Property during the site reconnaissance. Mr. Healy was contacted to help in the description of structures identified during the aerial photograph review. Mr. Healey stated that there were no septic tanks on the Property.

**Installation Management Agency, Army Reserve Division**  
**Record of Communication**

Date:	February 24, 2004
Job No.	1401-11
Client:	88 <sup>th</sup> RRC
Recorded By:	Michael Dickinson
Talked With:	Ms. Nikki Foster, Environmental Manager
Of:	TAD-PGS Contractor for the 88 <sup>th</sup> RRC
Nature of Interview:	On-site Interview
Phone No.:	(330) 283-3584

**Items Discussed**

Ms. Foster escorted IMA-ARD around the Property during the site reconnaissance. Ms. Foster answered questions with regards to the small quantity generator permit and the facility's procedures for disposing of hazardous waste, POLs, etc. Ms. Foster also provided several site specific documents to IMA-ARD.



**ATTACHMENT E**  
**Research Documents**

**ATTACHMENT F**  
**Aerial Photographs**

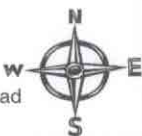


**Prepared For:**

88th RRC  
506 Roeder Circle  
Fort Snelling, MN 55111

**Location of Property:**

2LT William S. Huisman USARC, 25445 Harvard Road  
Warrensville Heights, OH 44122



Installation Management Agency,  
Army Reserve Division  
1401 Deshler Street SW  
Fort McPherson, GA 30330

Project #: 1401-11 Prepared By: MD

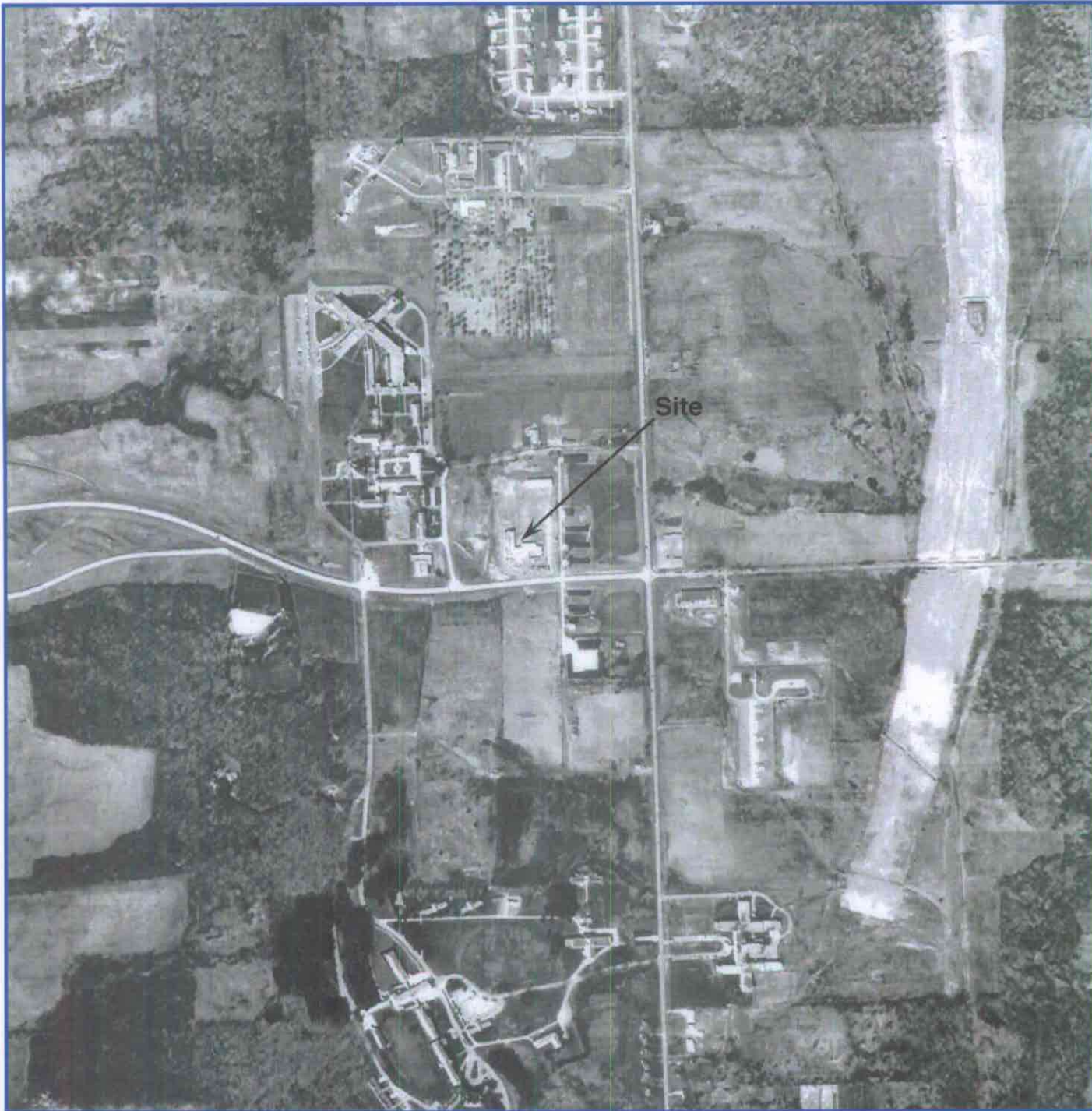
**Aerial Photograph**  
(1952)

Attachment

**F-1**

Scale: NTS Date: 4/12/2004 Source: EDR



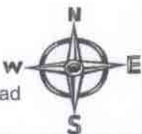


**Prepared For:**

88th RRC  
506 Roeder Circle  
Fort Snelling, MN 55111

**Location of Property:**

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Warrensville Heights, OH 44122



Installation Management Agency,  
Army Reserve Division  
1401 Deshler Street SW  
Fort McPherson, GA 30330

Project #: 1401-11

Prepared By: MD

**Aerial Photograph**  
(1962)

Attachment

**F-2**

Scale:

NTS

Date:

4/12/2004

Source: EDR



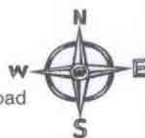


**Prepared For:**

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**Location of Property:**

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Installation Management Agency,  
Army Reserve Division  
1401 Deshler Street SW  
Fort McPherson, GA 30330

Project #: 1401-11 Prepared By: MD

**Aerial Photograph**  
(1977)

Attachment

**F-3**

Scale: NTS Date: 4/12/2004 Source: EDR



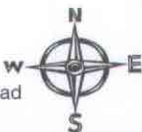


**Prepared For:**

88th RRC  
506 Roeder Circle  
Fort Snelling, MN 55111

**Location of Property:**

2LT William S. Huisman USARC, 25445 Harvard Road  
Warrensville Heights, OH 44122



Installation Management Agency,  
Army Reserve Division  
1401 Deshler Street SW  
Fort McPherson, GA 30330

Project #: 1401-11 Prepared By: MD

Scale: NTS Date: 4/12/2004 Source: EDR

**Aerial Photograph  
(1991)**

Attachment

**F-4**



**Prepared For:**

88th RRC  
506 Roeder Circle  
Fort Snelling, MN 55111

**Location of Property:**

2LT William S. Huisman USARC, 25445 Harvard Road  
Warrensville Heights, OH 44122



Installation Management Agency,  
Army Reserve Division  
1401 Deshler Street SW  
Fort McPherson, GA 30330

Project #: 1401-11 Prepared By: MD

**Aerial Photograph**  
(2002)

Attachment

Scale: NTS Date: 2/23/2004 Source: GlobExplorer

**F-5**

## **ATTACHMENT G**

### **USGS Topographic Quadrangle Map**





Installation Management  
Agency,  
Army Reserve Division

**Prepared for:**

88th RRC  
506 Roeder Circle  
Fort Snelling, MN 55111

**Location of Property:**

2LT William S. Huisman USARC  
25445 Harvard Road  
Warrensville Heights, OH 44122

**U.S.G.S Topographic  
Quadrangle Map**

Source: Shaker Heights Quad, 1979  
Contour Interval: 10 feet

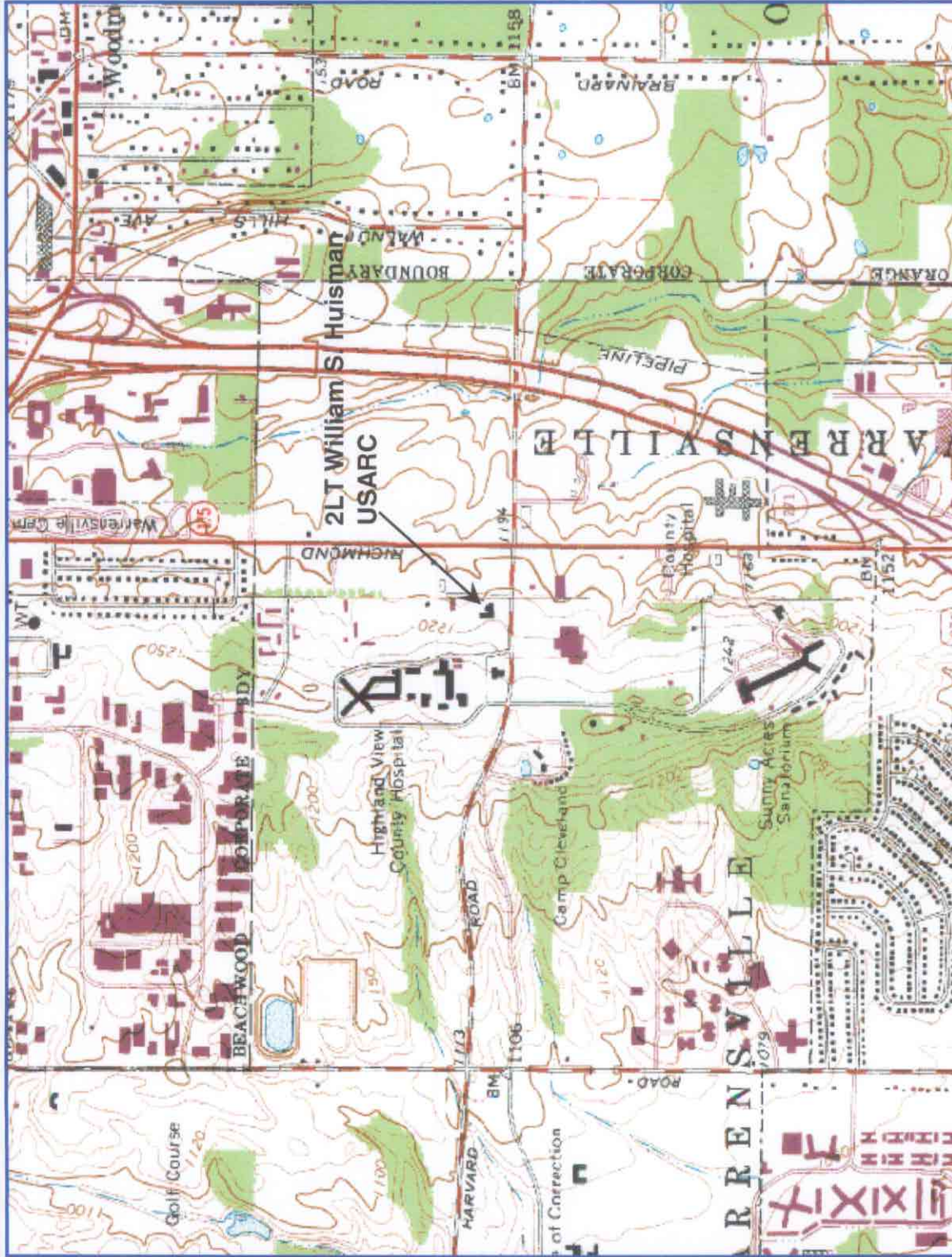
Project # 1401-11

Scale: 1:24,000

Created by: MD

Date: 2/23/04

**Attachment G**



**ATTACHMENT H**  
**EDR Database Report**



**EDR®** Environmental  
Data Resources Inc

## **The EDR Radius Map with GeoCheck®**

**Huisman USARC  
25445 Harvard Road  
Warrensville Heights, OH 44122**

**Inquiry Number: 1136980.3s**

**February 27, 2004**

## **The Standard in Environmental Risk Management Information**

440 Wheelers Farms Road  
Milford, Connecticut 06460

### **Nationwide Customer Service**

Telephone: 1-800-352-0050  
Fax: 1-800-231-6802  
Internet: [www.edrnet.com](http://www.edrnet.com)



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*Thank you for your business.*  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-00. Search distances are per ASTM standard or custom distances requested by the user.

### TARGET PROPERTY INFORMATION

#### ADDRESS

25445 HARVARD ROAD  
WARRENSVILLE HEIGHTS, OH 44122

#### COORDINATES

Latitude (North): 41.450000 - 41° 27' 0.0"  
Longitude (West): 81.500400 - 81° 30' 1.4"  
Universal Transverse Mercator: Zone 17  
UTM X (Meters): 458201.9  
UTM Y (Meters): 4588621.5  
Elevation: 1216 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property: 41081-D5 SHAKER HEIGHTS, OH  
Source: USGS 7.5 min quad index

### TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following government records. For more information on this property see page 6 of the attached EDR Radius Map report:

<u>Site</u>	<u>Database(s)</u>	<u>EPA ID</u>
2ND LT WILLIAM S. HUISMAN 25445 HARBARD RD WARRENSVILLE HTS, OH 44122	LUST	N/A

### DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ( "reasonably ascertainable ") government records either on the target property or within the ASTM E 1527-00 search radius around the target property for the following databases:

### FEDERAL ASTM STANDARD

NPL..... National Priority List  
Proposed NPL..... Proposed National Priority List Sites  
CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System  
CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

## EXECUTIVE SUMMARY

<b>CORRACTS</b> .....	Corrective Action Report
<b>RCRIS-TSD</b> .....	Resource Conservation and Recovery Information System
<b>RCRIS-LQG</b> .....	Resource Conservation and Recovery Information System
<b>RCRIS-SQG</b> .....	Resource Conservation and Recovery Information System
<b>ERNS</b> .....	Emergency Response Notification System

### STATE ASTM STANDARD

<b>SHWS</b> .....	This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.
<b>SWF/LF</b> .....	Licensed Solid Waste Facilities
<b>UST</b> .....	Underground Storage Tank Tank File
<b>DERR</b> .....	Division of Emergency & Remedial Response's Database
<b>VCP</b> .....	Voluntary Action Program Sites

### FEDERAL ASTM SUPPLEMENTAL

<b>CONSENT</b> .....	Superfund (CERCLA) Consent Decrees
<b>ROD</b> .....	Records Of Decision
<b>Delisted NPL</b> .....	National Priority List Deletions
<b>FINDS</b> .....	Facility Index System/Facility Identification Initiative Program Summary Report
<b>HMIRS</b> .....	Hazardous Materials Information Reporting System
<b>MLTS</b> .....	Material Licensing Tracking System
<b>MINES</b> .....	Mines Master Index File
<b>NPL Liens</b> .....	Federal Superfund Liens
<b>PADS</b> .....	PCB Activity Database System
<b>US BROWNFIELDS</b> .....	A Listing of Brownfields Sites
<b>DOD</b> .....	Department of Defense Sites
<b>RAATS</b> .....	RCRA Administrative Action Tracking System
<b>TRIS</b> .....	Toxic Chemical Release Inventory System
<b>TSCA</b> .....	Toxic Substances Control Act
<b>SSTS</b> .....	Section 7 Tracking Systems
<b>FTTS INSP</b> .....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

### STATE OR LOCAL ASTM SUPPLEMENTAL

<b>MSL</b> .....	Master Sites List
<b>OH Spills</b> .....	Emergency Response Database
<b>TOWNGAS</b> .....	DERR Towngas Database
<b>UNREG LTANKS</b> .....	Ohio Leaking UST File
<b>HIST LF</b> .....	Old Solid Waste Landfill
<b>INST CONTROL</b> .....	Sites with Institutional and/or Engineering Controls

### EDR PROPRIETARY HISTORICAL DATABASES

<b>Coal Gas</b> .....	Former Manufactured Gas (Coal Gas) Sites
-----------------------	--

### BROWNFIELDS DATABASES

<b>US BROWNFIELDS</b> .....	A Listing of Brownfields Sites
<b>VCP</b> .....	Voluntary Action Program Sites

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

## EXECUTIVE SUMMARY

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

### STATE ASTM STANDARD

**LUST:** The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Commerce Division of State Fire Marshal's List of Reported Petroleum Underground Storage Tank Release Incidents.

A review of the LUST list, as provided by EDR, and dated 12/14/2003 has revealed that there are 2 LUST sites within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
EASTERN CAMPUS	4250 RICHMOND RD	1/4 - 1/2 SSE	A2	6
<b><i>CUYAHOGA COMMUNITY COLLEGE E</i></b>	<b><i>4250 RICHMOND RD</i></b>	<b><i>1/4 - 1/2 SSE</i></b>	<b><i>A3</i></b>	<b><i>6</i></b>

## EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

Site Name

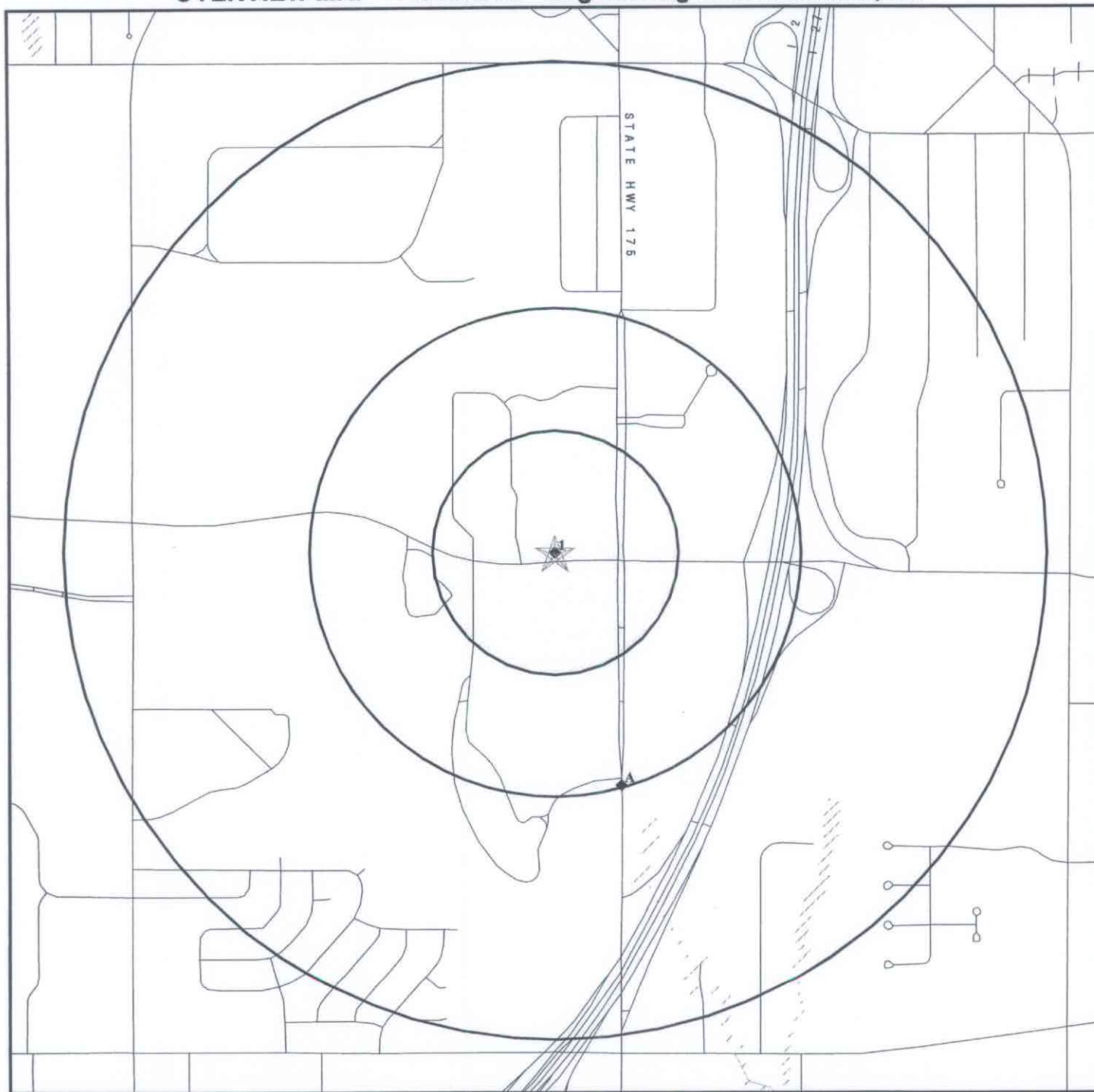
MC FARLAND'S CORNERS/UNKNOWN SOURCE  
HIGHLAND VIEW HOSPITAL  
BP OIL CO SITE 04009  
MCFARLAND'S CORNERS

Database(s)

MSL  
LUST  
RCRIS-SQG, FINDS  
DERR



# OVERVIEW MAP - 1136980.3s - Engineering & Environment, Inc.



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Coal Gasification Sites
- National Priority List Sites
- Landfill Sites
- Dept. Defense Sites

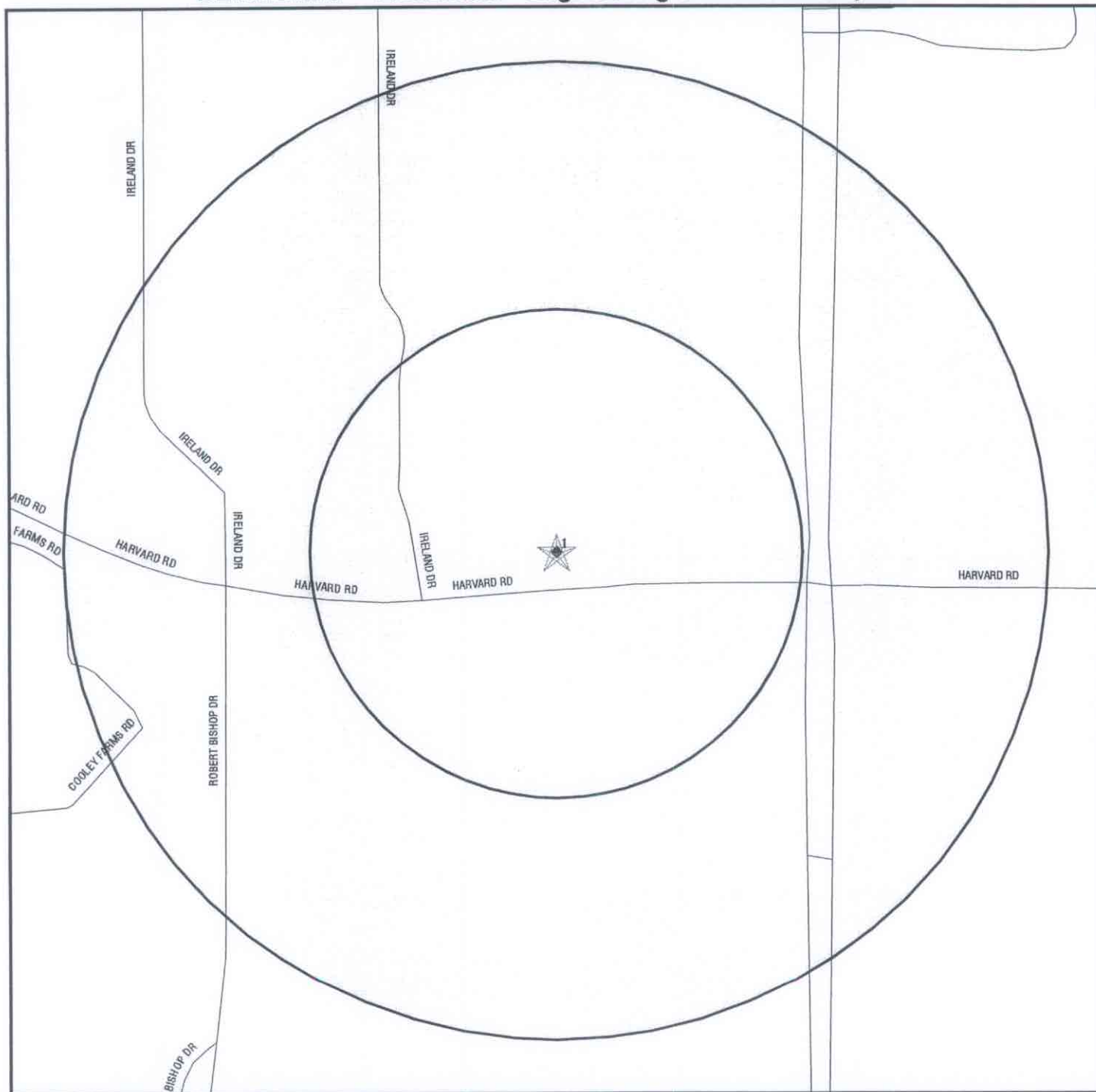
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone

0 1/4 1/2 1 Miles

**TARGET PROPERTY:** Huisman USARC  
**ADDRESS:** 25445 Harvard Road  
**CITY/STATE/ZIP:** Warrensville Heights OH 44122  
**LAT/LONG:** 41.4500 / 81.5004

**CUSTOMER:** Engineering & Environment, Inc.  
**CONTACT:** Michael Dickinson  
**INQUIRY #:** 1136980.3s  
**DATE:** February 27, 2004 12:49 pm

# DETAIL MAP - 1136980.3s - Engineering & Environment, Inc.



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Coal Gasification Sites
- Sensitive Receptors
- National Priority List Sites
- Landfill Sites
- Dept. Defense Sites

- ~ Oil & Gas pipelines
- ▨ 100-year flood zone
- ▨ 500-year flood zone

0 1/16 1/8 1/4 Miles

**TARGET PROPERTY:** Huisman USARC  
**ADDRESS:** 25445 Harvard Road  
**CITY/STATE/ZIP:** Warrensville Heights OH 44122  
**LAT/LONG:** 41.4500 / 81.5004

**CUSTOMER:** Engineering & Environment, Inc.  
**CONTACT:** Michael Dickinson  
**INQUIRY #:** 1136980.3s  
**DATE:** February 27, 2004 12:50 pm

## MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b><u>FEDERAL ASTM STANDARD</u></b>								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP		0.250	0	0	NR	NR	NR	0
CORRACTS		1.000	0	0	0	0	NR	0
RCRIS-TSD		0.500	0	0	0	NR	NR	0
RCRIS Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRIS Sm. Quan. Gen.		0.250	0	0	NR	NR	NR	0
ERNS		TP	NR	NR	NR	NR	NR	0
<b><u>STATE ASTM STANDARD</u></b>								
State Haz. Waste		N/A	N/A	N/A	N/A	N/A	N/A	N/A
State Landfill		0.500	0	0	0	NR	NR	0
LUST	X	0.500	0	0	2	NR	NR	2
UST		0.250	0	0	NR	NR	NR	0
DERR		1.000	0	0	0	0	NR	0
VCP		0.500	0	0	0	NR	NR	0
<b><u>FEDERAL ASTM SUPPLEMENTAL</u></b>								
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
HMIRS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
NPL Liens		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
<b><u>STATE OR LOCAL ASTM SUPPLEMENTAL</u></b>								
MSL		1.000	0	0	0	0	NR	0
OH Spills		TP	NR	NR	NR	NR	NR	0
TOWNGAS		1.000	0	0	0	0	NR	0
UNREG LTANKS		0.500	0	0	0	NR	NR	0
HIST LF		0.500	0	0	0	NR	NR	0
INST CONTROL		0.250	0	0	NR	NR	NR	0

## MAP FINDINGS SUMMARY

<u>Database</u>	<u>Target Property</u>	<u>Search Distance (Miles)</u>	<u>&lt; 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>&gt; 1</u>	<u>Total Plotted</u>
<b><u>EDR PROPRIETARY HISTORICAL DATABASES</u></b>								
Coal Gas		1.000	0	0	0	0	NR	0
<b><u>BROWNFIELDS DATABASES</u></b>								
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
VCP		0.500	0	0	0	NR	NR	0

**NOTES:**

AQUIFLOW - see EDR Physical Setting Source Addendum

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

N/A = This State does not maintain a SHWS list. See the Federal CERCLIS list.



Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
EPA ID Number

Coal Gas Site Search: No site was found in a search of Real Property Scan's ENVIROHAZ database.

1  
Target  
Property 2ND LT WILLIAM S. HUISMAN  
25445 HARBARD RD  
WARRENSVILLE HTS, OH 44122

LUST S103422777  
N/A

Actual:  
1215 ft.

LUST:  
Owner: UNITED STATES ARMY RESERVE  
Facility Status: Inactive  
LTF Status: 6 Closure of regulated UST  
Release Number: 18009733-N00001  
Owner Address: 450 PENNSYLVANIA AVE  
DELAWARE, OH 43015  
FR Status: No Further Action letter issued  
Old Facility Id: 189733  
Former LUST Release Number: 188227700  
Release Date: Not reported

A2  
SSE  
1/4-1/2  
2611 ft.  
EASTERN CAMPUS  
4250 RICHMOND RD  
WARRENSVILLE TWP, OH 44122

LUST S104775808  
N/A

Relative:  
Lower

Site 1 of 2 in cluster A

Actual:  
1168 ft.

LUST:  
Owner: EASTERN CAMPUS  
Facility Status: Inactive  
LTF Status: 1 SUS/CON from regulated UST  
Release Number: 18010582-N00001  
Owner Address: 4250 RICHMOND RD  
WARRENSVILLE TWP 44122  
FR Status: No Further Action letter issued  
Old Facility Id: 0  
Former LUST Release Number: 18927500  
Release Date: Not reported

A3  
SSE  
1/4-1/2  
2611 ft.  
CUYAHOGA COMMUNITY COLLEGE E  
4250 RICHMOND RD  
HIGHLAND HILLS, OH 44122

RCRIS-SQG 1000146456  
FINDS OHD980824056  
UST  
LUST

Relative:  
Lower

Site 2 of 2 in cluster A

Actual:  
1168 ft.

RCRIS:  
Owner: CUYAHOGA COMMUNITY COLLEGE  
(312) 555-1212  
EPA ID: OHD980824056  
Contact: THOMAS SOMERVILLE  
(216) 241-5966  
Classification: Small Quantity Generator  
TSDF Activities: Not reported

Map ID  
Direction  
Distance  
Distance (ft.)  
Elevation

Site

MAP FINDINGS

Database(s)

EDR ID Number  
EPA ID Number

**CUYAHOGA COMMUNITY COLLEGE E (Continued)**

**1000146456**

Violation Status: No violations found

**FINDS:**

Other Pertinent Environmental Activity Identified at Site:

Ohio Core database (OH\_CORE)

Resource Conservation and Recovery Act Information system (RCRAINFO)

**LUST:**

Owner: TOM SOMERVILLE  
Facility Status: Active  
LTF Status: 6 Closure of regulated UST  
Release Number: 18000688-N00001  
Owner Address: 2900 COMMUNITY COLLEGE AVE  
CLEVELAND, OH 44115  
FR Status: A possible incident is reported  
Old Facility Id: 180688  
Former LUST Release Number: 0  
Release Date: 2/4/2002 0:00

**UST:**

Facility ID:	18000688	Tank ID:	T00001
Owner:	CUYAHOGA COMMUNITY COLLEGE		
Owner Address:	2900 COMMUNITY COLLEGE AVE CLEVELAND, OH 44115		
Capacity:	2500	Tank Status:	Currently In Use
Install Date:	10/01/89		
Content:	Diesel		
Tank Type:	Fiberglass Reinforced Plastic		
Facility ID:	18000688	Tank ID:	T00002
Owner:	CUYAHOGA COMMUNITY COLLEGE		
Owner Address:	2900 COMMUNITY COLLEGE AVE CLEVELAND, OH 44115		
Capacity:	6000	Tank Status:	Currently In Use
Install Date:	01/01/93		
Content:	Gasoline		
Tank Type:	Fiberglass Reinforced Plastic		

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BAINBRIDGE TWP	S103686244	MCFARLAND'S CORNERS/UNKNOWN SOURCE	SR 306 / US ROUTE 422	44022	MSL
BAINBRIDGE TWP	S105680788	MCFARLAND'S CORNERS	STATE RTE 306 / US RTE 422	44022	DERR
BEACHWOOD	S105849437	HIGHLAND VIEW HOSPITAL	IRELAND DRIVE	44122	LUST
BEACHWOOD	1004765478	BP OIL CO SITE 04009	25705 RICHMOND RD	44122	RCRIS-SQG, FINDS

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Elapsed ASTM days:** Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

### FEDERAL ASTM STANDARD RECORDS

#### **NPL: National Priority List**

Source: EPA  
Telephone: N/A

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 01/29/04  
Date Made Active at EDR: 02/27/04  
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 02/06/04  
Elapsed ASTM days: 21  
Date of Last EDR Contact: 02/06/04

#### **NPL Site Boundaries**

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 3  
Telephone 215-814-5418

EPA Region 4  
Telephone 404-562-8033

EPA Region 6  
Telephone: 214-655-6659

EPA Region 8  
Telephone: 303-312-6774

#### **Proposed NPL: Proposed National Priority List Sites**

Source: EPA  
Telephone: N/A

Date of Government Version: 01/07/04  
Date Made Active at EDR: 02/27/04  
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 02/06/04  
Elapsed ASTM days: 21  
Date of Last EDR Contact: 02/06/04

#### **CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System**

Source: EPA  
Telephone: 703-413-0223

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 11/17/03  
Date Made Active at EDR: 02/02/04  
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 12/22/03  
Elapsed ASTM days: 42  
Date of Last EDR Contact: 12/22/03

#### **CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned**

Source: EPA  
Telephone: 703-413-0223

As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/17/03  
Date Made Active at EDR: 02/02/04  
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 12/22/03  
Elapsed ASTM days: 42  
Date of Last EDR Contact: 12/22/03

### **CORRACTS:** Corrective Action Report

Source: EPA

Telephone: 800-424-9346

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/18/03  
Date Made Active at EDR: 02/02/04  
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 12/26/03  
Elapsed ASTM days: 38  
Date of Last EDR Contact: 12/08/03

### **RCRIS:** Resource Conservation and Recovery Information System

Source: EPA

Telephone: 800-424-9346

Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs): generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs): generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs): generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 01/12/04  
Date Made Active at EDR: 02/10/04  
Database Release Frequency: Varies

Date of Data Arrival at EDR: 01/19/04  
Elapsed ASTM days: 22  
Date of Last EDR Contact: 01/19/04

### **ERNS:** Emergency Response Notification System

Source: National Response Center, United States Coast Guard

Telephone: 202-260-2342

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/02  
Date Made Active at EDR: 02/03/03  
Database Release Frequency: Annually

Date of Data Arrival at EDR: 01/27/03  
Elapsed ASTM days: 7  
Date of Last EDR Contact: 01/26/04

## **FEDERAL ASTM SUPPLEMENTAL RECORDS**

### **BRS:** Biennial Reporting System

Source: EPA/NTIS

Telephone: 800-424-9346

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/01/01  
Database Release Frequency: Biennially

Date of Last EDR Contact: 12/16/03  
Date of Next Scheduled EDR Contact: 03/15/04

### **CONSENT:** Superfund (CERCLA) Consent Decrees

Source: EPA Regional Offices

Telephone: Varies

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: N/A  
Database Release Frequency: Varies

Date of Last EDR Contact: N/A  
Date of Next Scheduled EDR Contact: N/A

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### **ROD: Records Of Decision**

Source: EPA

Telephone: 703-416-0223

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/09/04

Database Release Frequency: Annually

Date of Last EDR Contact: 01/06/04

Date of Next Scheduled EDR Contact: 04/05/04

### **DELISTED NPL: National Priority List Deletions**

Source: EPA

Telephone: N/A

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 01/29/04

Database Release Frequency: Quarterly

Date of Last EDR Contact: 02/06/04

Date of Next Scheduled EDR Contact: 05/01/04

### **FINDS: Facility Index System/Facility Identification Initiative Program Summary Report**

Source: EPA

Telephone: N/A

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 10/23/03

Database Release Frequency: Quarterly

Date of Last EDR Contact: 01/06/04

Date of Next Scheduled EDR Contact: 04/05/04

### **HMIRS: Hazardous Materials Information Reporting System**

Source: U.S. Department of Transportation

Telephone: 202-366-4555

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/18/03

Database Release Frequency: Annually

Date of Last EDR Contact: 01/19/04

Date of Next Scheduled EDR Contact: 04/19/04

### **MLTS: Material Licensing Tracking System**

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 01/15/04

Database Release Frequency: Quarterly

Date of Last EDR Contact: 01/06/04

Date of Next Scheduled EDR Contact: 04/05/04

### **MINES: Mines Master Index File**

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959

Date of Government Version: 11/25/03

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 12/29/03

Date of Next Scheduled EDR Contact: 03/29/04

### **NPL LIENS: Federal Superfund Liens**

Source: EPA

Telephone: 202-564-4267

Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.



## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/91  
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 11/21/03  
Date of Next Scheduled EDR Contact: 02/23/04

### **PADS:** PCB Activity Database System

Source: EPA

Telephone: 202-564-3887

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 09/30/03  
Database Release Frequency: Annually

Date of Last EDR Contact: 02/09/04  
Date of Next Scheduled EDR Contact: 05/10/04

### **DOD:** Department of Defense Sites

Source: USGS

Telephone: 703-648-5920

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 10/01/03  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 02/02/04  
Date of Next Scheduled EDR Contact: 05/10/04

### **STORMWATER:** Storm Water General Permits

Source: Environmental Protection Agency

Telephone: 202 564-0746

A listing of all facilities with Storm Water General Permits.

Date of Government Version: N/A  
Database Release Frequency: Quarterly

Date of Last EDR Contact: N/A  
Date of Next Scheduled EDR Contact: N/A

### **US BROWNFIELDS:** A Listing of Brownfields Sites

Source: Environmental Protection Agency

Telephone: 202-566-2777

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become BCRLF cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 07/15/03  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 12/17/03  
Date of Next Scheduled EDR Contact: 03/15/04

### **RMP:** Risk Management Plans

Source: Environmental Protection Agency

Telephone: 202-564-8600

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A  
Database Release Frequency: N/A

Date of Last EDR Contact: N/A  
Date of Next Scheduled EDR Contact: N/A

### **RAATS:** RCRA Administrative Action Tracking System

Source: EPA  
Telephone: 202-564-4104

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95  
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 12/08/03  
Date of Next Scheduled EDR Contact: 03/08/04

### **TRIS:** Toxic Chemical Release Inventory System

Source: EPA  
Telephone: 202-566-0250

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/01  
Database Release Frequency: Annually

Date of Last EDR Contact: 12/22/03  
Date of Next Scheduled EDR Contact: 03/22/04

### **TSCA:** Toxic Substances Control Act

Source: EPA  
Telephone: 202-260-5521

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/02  
Database Release Frequency: Every 4 Years

Date of Last EDR Contact: 12/08/03  
Date of Next Scheduled EDR Contact: 03/08/04

### **FTTS INSP:** FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA  
Telephone: 202-564-2501

Date of Government Version: 10/16/03  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 12/22/03  
Date of Next Scheduled EDR Contact: 03/22/04

### **SSTS:** Section 7 Tracking Systems

Source: EPA  
Telephone: 202-564-5008

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/01  
Database Release Frequency: Annually

Date of Last EDR Contact: 01/19/04  
Date of Next Scheduled EDR Contact: 04/19/04

### **FTTS:** FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA/Office of Prevention, Pesticides and Toxic Substances  
Telephone: 202-564-2501

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/16/03  
Database Release Frequency: Quarterly

Date of Last EDR Contact: 12/22/03  
Date of Next Scheduled EDR Contact: 03/22/04

## STATE OF OHIO ASTM STANDARD RECORDS

**SHWS:** This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

Source: EPA

Telephone: 703-413-0223

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: N/A  
Date Made Active at EDR: N/A  
Database Release Frequency: N/A

Date of Data Arrival at EDR: N/A  
Elapsed ASTM days: N/A  
Date of Last EDR Contact: 07/23/03

## SWF/LF: Licensed Solid Waste Facilities

Source: Ohio Environmental Protection Agency

Telephone: 614-644-2621

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/17/03  
Date Made Active at EDR: 12/16/03  
Database Release Frequency: Annually

Date of Data Arrival at EDR: 11/17/03  
Elapsed ASTM days: 29  
Date of Last EDR Contact: 02/09/04

## LUST: Leaking Underground Storage Tank File

Source: Department of Commerce

Telephone: 614-752-7924

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 12/14/03  
Date Made Active at EDR: 01/08/04  
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 12/16/03  
Elapsed ASTM days: 23  
Date of Last EDR Contact: 12/16/03

## UST: Underground Storage Tank File

Source: Department of Commerce

Telephone: 614-752-7938

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 12/14/03  
Date Made Active at EDR: 01/09/04  
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 12/16/03  
Elapsed ASTM days: 24  
Date of Last EDR Contact: 12/16/03

## DERR: Division of Emergency & Remedial Response's Database

Source: Ohio EPA, Div. of Emergency and Remedial Response

Telephone: 614-644-3538

The DERR database is an index of sites for which Ohio EPA maintains files. It includes sites with known or suspected contamination, but a site's inclusion in the database does not mean that it is now or has ever been contaminated.

Date of Government Version: 12/17/03  
Date Made Active at EDR: 01/08/04  
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 12/17/03  
Elapsed ASTM days: 22  
Date of Last EDR Contact: 12/16/03

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### VCP: Voluntary Action Program Sites

Source: Ohio EPA, Voluntary Action Program

Telephone: 614-644-2924

Site involved in the Voluntary Action Program.

Date of Government Version: 10/17/03

Date Made Active at EDR: 12/26/03

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 12/08/03

Elapsed ASTM days: 18

Date of Last EDR Contact: 12/08/03

### STATE OF OHIO ASTM SUPPLEMENTAL RECORDS

#### MSL: Master Sites List

Source: Ohio Environmental Protection Agency

Telephone: 614-644-2068

Ohio EPA no longer maintains or publishes the MSL, which was a list of sites with known or suspected contamination.

Please be advised that this report does not constitute a determination that any site identified in the report is or may be contaminated.

Date of Government Version: 03/01/99

Database Release Frequency: No Update Planned

Date of Last EDR Contact: 12/08/03

Date of Next Scheduled EDR Contact: 03/08/04

#### SPILLS: Emergency Response Database

Source: Ohio EPA

Telephone: 614-644-2084

All reported incidents, spills or releases to the environment.

Date of Government Version: 12/31/02

Database Release Frequency: Varies

Date of Last EDR Contact: 12/08/03

Date of Next Scheduled EDR Contact: 03/08/04

#### TOWNGAS: DERR Towngas Database

Source: Ohio EPA

Telephone: 614-644-3749

The database includes 82 very old sites (circa 1895) which produced gas from coal for street lighting. Most visual evidence of these sites has disappeared, however the potential for buried coal tar remains. The database is no longer in active use.

Date of Government Version: 07/28/92

Database Release Frequency: No Update Planned

Date of Last EDR Contact: 02/12/03

Date of Next Scheduled EDR Contact: N/A

#### HIST LF: Old Solid Waste Landfill

Source: Ohio EPA

Telephone: 614-644-3749

A list of about 1200 old abandoned dumps or landfills. This database was developed from Ohio EPA staff notebooks and other information dating from the mid-1970s

Date of Government Version: 01/01/80

Database Release Frequency: No Update Planned

Date of Last EDR Contact: 06/26/03

Date of Next Scheduled EDR Contact: N/A

#### UNREG LTANKS: Ohio Leaking UST File

Source: Department of Commerce

Telephone: 614-752-7938

A suspected or confirmed release of petroleum from a non-regulated UST.

Date of Government Version: 08/25/99

Database Release Frequency: No Update Planned

Date of Last EDR Contact: 08/01/03

Date of Next Scheduled EDR Contact: N/A

#### INST CONTROL: Sites with Institutional and/or Engineering Controls

Source: Ohio Environmental Protection Agency

Telephone: 614-644-2324

A database that tracks properties with institutional controls and/or engineering controls.



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/28/03  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 11/07/03  
Date of Next Scheduled EDR Contact: 03/08/04

## EDR PROPRIETARY HISTORICAL DATABASES

**Former Manufactured Gas (Coal Gas) Sites:** The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

### **Disclaimer Provided by Real Property Scan, Inc.**

The information contained in this report has predominantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins at any site. This report does not constitute a legal opinion.

## BROWNFIELDS DATABASES

### **VCP: Voluntary Action Program Sites**

Source: Ohio EPA, Voluntary Action Program  
Telephone: 614-644-2924  
Site involved in the Voluntary Action Program.

Date of Government Version: 10/17/03  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 12/08/03  
Date of Next Scheduled EDR Contact: 03/08/04

### **US BROWNFIELDS: A Listing of Brownfields Sites**

Source: Environmental Protection Agency  
Telephone: 202-566-2777

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become BCRLF cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: N/A  
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: N/A  
Date of Next Scheduled EDR Contact: N/A

## OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

**Oil/Gas Pipelines:** This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

### **Electric Power Transmission Line Data**

Source: PennWell Corporation

Telephone: (800) 823-6277

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

### **AHA Hospitals:**

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

### **Medical Centers: Provider of Services Listing**

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

### **Nursing Homes**

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

### **Public Schools**

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

### **Private Schools**

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

### **Daycare Centers: Licensed Child Day Care Facilities**

Source: Department of Job & Family Services

Telephone: 614-466-6282

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

### **STREET AND ADDRESS INFORMATION**

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## GEOCHECK® - PHYSICAL SETTING SOURCE ADDENDUM

### TARGET PROPERTY ADDRESS

HUISMAN USARC  
25445 HARVARD ROAD  
WARRENSVILLE HEIGHTS, OH 44122

### TARGET PROPERTY COORDINATES

Latitude (North):	41.450001 - 41° 27' 0.0"
Longitude (West):	81.500397 - 81° 30' 1.4"
Universal Transverse Mercator:	Zone 17
UTM X (Meters):	458201.9
UTM Y (Meters):	4588621.5
Elevation:	1216 ft. above sea level

EDR's GeoCheck Physical Setting Source Addendum has been developed to assist the environmental professional with the collection of physical setting source information in accordance with ASTM 1527-00, Section 7.2.3. Section 7.2.3 requires that a current USGS 7.5 Minute Topographic Map (or equivalent, such as the USGS Digital Elevation Model) be reviewed. It also requires that one or more additional physical setting sources be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to or from the property, and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice, to assess the impact of migration of recognized environmental conditions in connection with the property. Such additional physical setting sources generally include information about the topographic, hydrologic, hydrogeologic, and geologic characteristics of a site, and wells in the area.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata. EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

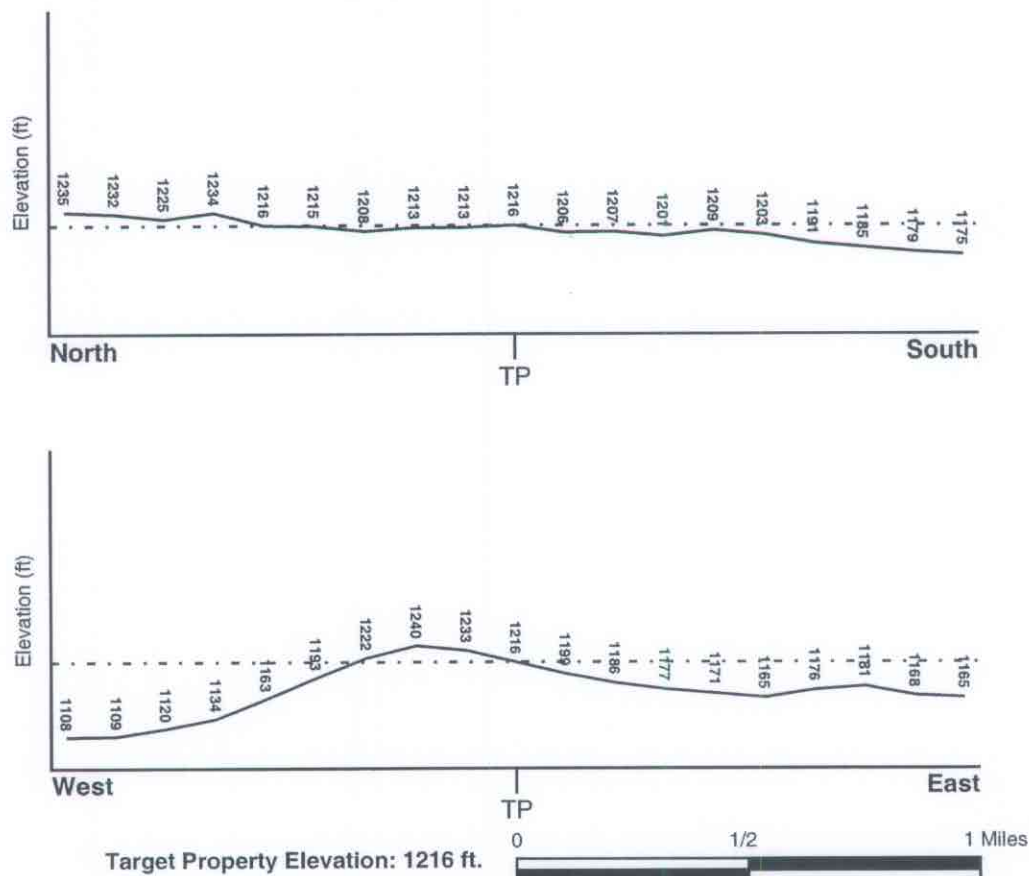
### TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

#### TARGET PROPERTY TOPOGRAPHY

USGS Topographic Map: 41081-D5 SHAKER HEIGHTS, OH  
General Topographic Gradient: General ESE  
Source: USGS 7.5 min quad index

### SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

### FEMA FLOOD ZONE

<u>Target Property County</u>	<u>FEMA Flood</u>
CUYAHOGA, OH	<u>Electronic Data</u>
	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property:	3907660125B
---------------------------------------	-------------

Additional Panels in search area:	3900940001A
	00000000000
	3907370005A
	3901350002B
	3901350003B

### NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic</u>
SHAKER HEIGHTS	<u>Data Coverage</u>
	Not Available

### HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION</u>	<u>GENERAL DIRECTION</u>
	<u>FROM TP</u>	<u>GROUNDWATER FLOW</u>
Not Reported		



## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### ROCK STRATIGRAPHIC UNIT

Era: Paleozoic  
System: Mississippian  
Series: Mississippian  
Code: M (decoded above as Era, System & Series)

#### GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: MAHONING  
Soil Surface Texture: silt loam  
Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.  
Soil Drainage Class: Somewhat poorly. Soils commonly have a layer with low hydraulic conductivity, wet state high in profile, etc. Depth to water table is 1 to 3 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches



## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 2.00 Min: 0.60	Max: 7.30 Min: 4.50
2	9 inches	36 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.20 Min: 0.00	Max: 7.80 Min: 4.50
3	36 inches	60 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.20 Min: 0.00	Max: 8.40 Min: 7.40

### OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: loam

Surficial Soil Types: loam

Shallow Soil Types: silty clay loam  
channery - loam

Deeper Soil Types: stratified  
gravelly - loamy sand  
silt loam  
weathered bedrock

### ADDITIONAL ENVIRONMENTAL RECORD SOURCES

According to ASTM E 1527-00, Section 7.2.2, "one or more additional state or local sources of environmental records may be checked, in the discretion of the environmental professional, to enhance and supplement federal and state sources... Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are reasonably ascertainable, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the records review (see 7.1.1), and (3) whether they are obtained, pursuant to local, good commercial or customary practice." One of the record sources listed in Section 7.2.2 is water well information. Water well information can be used to assist the environmental professional in assessing sources that may impact groundwater flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

### FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

### FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

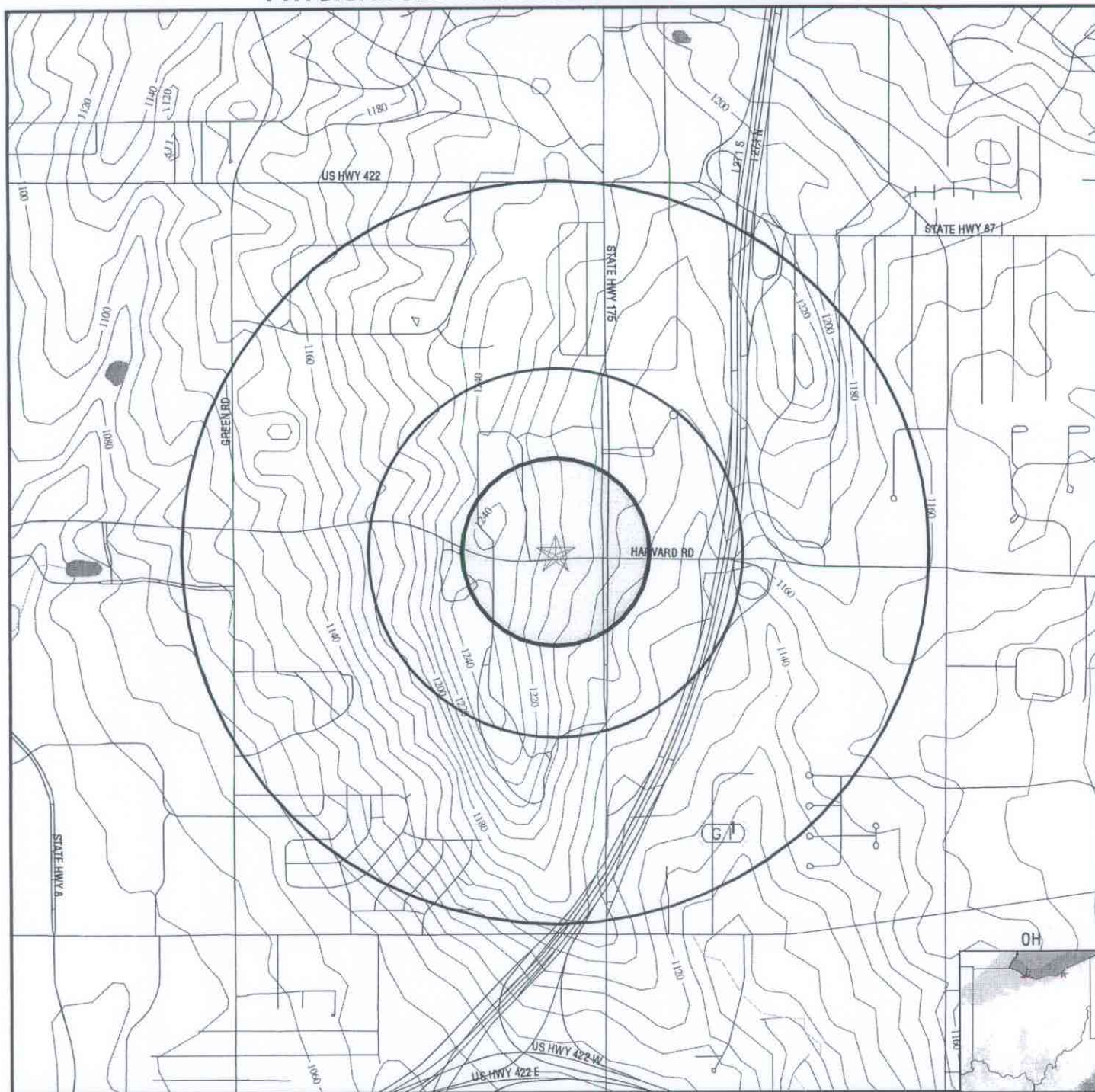
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

### STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

# PHYSICAL SETTING SOURCE MAP - 1136980.3s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location

0 1/4 1/2 1 Miles

**TARGET PROPERTY:** Huisman USARC  
**ADDRESS:** 25445 Harvard Road  
**CITY/STATE/ZIP:** Warrensville Heights OH 44122  
**LAT/LONG:** 41.4500 / 81.5004

**CUSTOMER:** Engineering & Environment, Inc.  
**CONTACT:** Michael Dickinson  
**INQUIRY #:** 1136980.3s  
**DATE:** February 27, 2004 12:50 pm



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database

EDR ID Number

1  
SSE  
1/2 - 1 Mile  
Lower

Site ID: 1851089-00  
Groundwater Flow: NOT REPORTED  
Shallow Water Depth: Not Reported  
Deep Water Depth: Not Reported  
Average Water Depth: 8.0  
Date: 7/96

AQUIFLOW 14544

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: OH Radon

### Radon Test Results

Zip	Total Sites	Median	1st Quartile	3rd Quartile	Min.	Max.
44122	370	1.1	0.6	1.7	0.1	114.6

Federal EPA Radon Zone for CUYAHOGA County: 2

Note: Zone 1 indoor average level > 4 pCi/L.  
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.  
 : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 44122

Number of sites tested: 2

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	Not Reported	Not Reported	Not Reported	Not Reported
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.500 pCi/L	100%	0%	0%

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### **USGS 7.5' Digital Elevation Model (DEM)**

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002. 7.5-Minute DEMs correspond to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps.

## HYDROLOGIC INFORMATION

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

## HYDROGEOLOGIC INFORMATION

### **AQUIFLOW<sup>®</sup> Information System**

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### **Geologic Age and Rock Stratigraphic Unit**

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### **STATSGO: State Soil Geographic Database**

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

## ADDITIONAL ENVIRONMENTAL RECORD SOURCES

### **FEDERAL WATER WELLS**

#### **PWS: Public Water Systems**

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### **PWS ENF: Public Water Systems Violation and Enforcement Data**

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

#### **USGS Water Wells: USGS National Water Inventory System (NWIS)**

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.



## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### STATE RECORDS

#### Public Water System Data

Source: Ohio Environmental Protection Agency

Telephone: 614-644-3677

The database includes community, transient noncommunity and nontransient noncommunity water wells; and source treatment unit locations.

### RADON

#### State Database: OH Radon

Source: Department of Health

Telephone: 614-644-2727

Radon Statistics for Zip Code Areas

#### Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

#### EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

### OTHER

#### Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

#### Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration